COMMONWEALTH OF PENNSYLVANIA.

REPORT

OF THE

COMMISSIONER FOR THE RESTORATION

OF THE

INLAND FISHERIES,

FOR THE YEAR 1870.

HARRISBURG:
B. SINGERLY, STATE PRINTER
1871.

REPORT.

HARRISBURG, *January* 23, 1871

To his Excellency JOHN W. GEARY,
Governor of Pennsylvania:

SIR:—In reporting upon the restoration of the inland fisheries, I will recapitulate, briefly, to save the trouble of reference to former documents, glancing at the history of the movement in the United States.

Of late years a manifest deterioration had been observed along our whole northern coast of the fisheries, which had heretofore furnished such a bountiful and apparently inexhaustible supply of edible migratory or anadromous fishes to the people of the region, and the minds of public spirited men were directed toward some means of remedying this evil. On examining into the subject they found that in the British islands and on the continent of Europe the same had been observed and remedies applied. In France the government had taken the subject up, and established a department having it in charge. In England, Ireland and Scotland also, measures had been adopted to arrest the decay of this vast source of food supply, and artificial means and proper laws had been established with most beneficial results.

In 1865 Massachusetts appointed commissioners to inquire into the subject, and the result was that a law was passed requiring fish-ways to be made in the impeding dams, and a code of laws established for the regulation of the fisheries.

In 1866 a convention met in Harrisburg to consider the state of things in Pennsylvania, and a law was prepared with care, under the supervision of men of first rate legal reputation, which law was promptly passed by the Legislature then in session, receiving the signature of the Governor on the 30th day of March, 1866.

This law was based on the Massachusetts enactment, and required that fish ways should be constructed in all the dams of the Susquehanna and its tributaries.

The first impeding dam on the Susquehanna was the Columbia dam, the Safe Harbor dam, a short distance below, having been then recently carried away by a freshet, and not re-built, the Columbia dam belonging to the Tide Water canal company, which company was bound to keep an open passage for fish, in its dam. Accordingly, when required by the Commissioner appointed by the Governor, the Tide Water canal company, without hesitation, and at an expense to itself of some five thousand dollars, created the opening.

The corporations, however, owning the next dams above, having purchased those works without incumbrance from the State, demurred to the

law as unconstitutional, and refused or neglected to comply with its provisions.

Suit was instituted by the State authorities against these corporations, in the court of quarter sessions of Dauphin county, and it was there decided that the companies were not compelled, at their own expense, to make these openings. The case was then carried to the Supreme Court, and the opinion of the court below was affirmed by that tribunal.

These proceedings were not closed until the spring session of 1870, of the Supreme Court, at Harrisburg.

The legal proceedings were initiated in strict obedience to the letter of the law.

There is no use in attempting to account for the laws delay. We are now, however, at the end; for, I take it, there is no way for the State to reach a higher court—though if the case had gone against the corporations, they could have appealed to the courts of the United States. I mention this, for judicial decision has taken a different direction in Massachusetts. There, as I understand, it has been decided in the Supreme Court that the owners of dams are liable to open the dams at their own expense—and the corporations have appealed to the Federal courts.

There is some technical difference, no doubt, in the manner in which rights in the dams became vested in private parties, in Pennsylvania and in Massachusetts. There is no difference in the original setting aside of the people's right of fishing by the construction of the dams, in either case. In Massachusetts, the people do not have to pay for the laches of their former servants. In Pennsylvania, it seems they do; for I cannot perceive that the State may not make the openings in the dams, provided she pays for them. [See Appendix.]

The result of the opening at Columbia, for the first two years, appeared to be a complete success. The year 1867, showed a catch, reported from fifteen to twenty thousand in number, above that dam. In 1868, the catch was perhaps half that number, whilst in 1869 and 1870, the catch has probably not exceeded five thousand in each year.

Probably because even the highest number caught scattered over a distance of fifty miles was no temptation for the number of hands required to manage large seines; and because, also, it was too expensive to clean out the old fishing grounds for seining; and because the kind of seines necessary for shad fishing, on anything like a profitable scale, were too expensive, the inducements are insufficient for fishing in the fifty mile reach above the Columbia dam at present. Unless the shad return in large numbers to the river, fishing on the proper scale is not likely to be prosecuted.

Although the Legislature was not slow in enacting sufficiently stringent laws, and which could be enforced with perfect ease, the fishing in the neighborhood of the Columbia dam has been practiced in defiance of them.

In the statute April 9, 1868, it is enacted, that it shall not be "lawful to fish with any seine or by any other system of entrapping in numbers within two hundred yards of any sluice or other device erected for the passage of fish as described in this act, or *upon or about* any dam in or upon which such sluice shall have been erected," &c., &c.—*Pamphlet Laws* 1868, *p.* 78. Yet regularly as the spring comes round, there are dip nets worked by sweeps, like well sweeps, at every few rods; kept in operation perpetually during the whole twenty-four hours in front of the Columbia dam, rising out of and falling into the reacting water of the dam as it falls over its face.

These dip nets are used for catching mullets, their very operation precluding the possibility of catching shad in them, for their intermittent motion has a tendency, nay is absolutely certain to scare away those timid fish from the face of the dam.

Ten or a dozen such machines working night and day, in a row, in front of the dam and in its reaction water, at distances not more than six or eight rods apart, effectually stop the approach of the fish to the dam, to seek a means of passing through it. It is well known that the shad upon reaching the dam nose along in front of it, in the reaction, seeking some opposing current against which it is their instinct to propel themselves. But interrupted as they are by this constant rising and falling of these great dip nets, ten or twelve feet square, the timid fish are baffled and driven away. Is not this system of dip netting a fishing "upon or about" the dam, etc.? Yet yearly they make their appearance, and operate in sight of the people with perfect impunity, any individual of whom might prosecute the owners to conviction and to the payment of the penalty, if he were so minded. Notwithstanding this, however, and although the catch above the dam is small, many shad make their way through this opening yearly. For yearly as the autumn comes round, vast numbers of small fry are seen descending the river from waters above the Columbia dam. These little creatures, however, are not exempt from unlawful, piratical fishing. Hundreds of thousands of them are destroyed yearly in the vile fish baskets, which no law that the Legislature can pass seems capable of abolishing.

Our ancestors in England put an end to this shameful system of destroying fish over six hundred years ago. Their abolishment is even provided for in Magna Charta.*

In Hepworth Dixon's interesting sketches relating to "Her Majesty's Tower," (The tower of London,) I find the following:

" One of the King's officers, the Tower Warden, was a man with extensive powers and a hundred archers at his back. A subject always in dispute between this officer and the city folk, was a claim put forth by him to catch fish in what the commons called an unfair way. The warden claimed a right to put kidels in the water, not only in front of the wharf, but in any other part of the stream. Now a kidel was a weir (or wear) filled up with nets which caught all fish coming down with the tide, both the small fry and the old flappers. What free angler could stand this claim? Through five or six reigns our fathers fought against this abuse, and the question of a warden's right to put kidels in the Thames was a topic which roused the water-side folk into fiercer passion than reports of fighting in Picardy and pilgrimage in the Holy Land.

"A kidel in front of the wharf was an outrage as well as an injury. Our fathers loved the rod and line. Hundreds of years before Izaack quaffed the village ale, and listened to the milkmaid's song, his foregoers had been wont to cast their lines into the Lea, the Wandle and the Thames. Nor was the gentle craft pursued by them in sport alone; fish was an article of food; the fisheries on the Thames being large enough to employ, and rich enough to feed a tenth of the population on its banks; and to all these pleasures and profits, the right of a Tower Warden to net the stream with kidels

*Clause 36 according to Rowland ("Manual of the English Constitution") or according to Creasy, (on English constitutional law.) clause 33 of Magna Charta reads thus: "All wears for the time to come shall be demolished in the rivers Thames and Medway, and throughout all England, except upon the sea coast." And in a note Creasy says: "The peculiar kind of wear mentioned in the Latin text, and called *Kidelli*, were dams having a narrow cut in them, and furnished with devices for catching fish." Precisely the fish basket of the present day. He also says: "It was the opinion of Lord Coke that no part of a stream being the King's highway could be appropriated by any private individual." A legal friend has kindly furnished me the original from Blackstone's Law Tracts, vol. 2, p. 24:

"SECTION 33. Omnes Kydelli de cetero deponantur penitus de Thamisia et de Medewaye et per to tam Angliam nisi per costeram maris."

was a serious bar. The water-side taverns were up in arms when these water-side taverns were the meeting houses of all our turbulent and daring spirits. They had indeed good reason for their wrath, since the King's warden, not content with setting his own kidels in the Thames, rented to others his privilege of interfering with honest sport and decent trade. For a small sum of money any rascal on the river could buy his license and set up kidels in the Lea and Medway as well as in the Thames. The effect of netting those rivers was to destroy the salmon and shad, as well as to capture the flounders and the trout.

"Now and then a prince, in his distress, consented to forego this river right; but his warden took scant notice of a pledge which he thought injurious to his pocket and derogatory to his prince.

"Lion Heart (Richard Cœur de Lion) strove to bring this quarrel to an end, and in the eighth year of his reign, in the press of a sharp war, he made what he said was a high sacrifice in giving up kidels, and putting his warden of the tower on a level with humbler and fairer folk. For this surrender Lion Heart expected to be paid, not only in earthly coin, but in heavenly grace. In the grant by which he gave the public their own, he declared that for the salvation of his soul, for the salvation of his father's soul, and for the salvation of the souls of all his ancestors, as well as for the benefit of his people and the peace of his realm, no more kidels should be set up in the Thames.

"But Lion Heart failed to keep his pledge. The warden was always nigh; the king was often far away; and the kidel question helped to keep alive the long resistance to King John.

"In the great charter there was a special clause on kidels, King John consenting, among other things, that under pain of excommunication all kidels should be removed from the Thames, and from his other streams. Yet the warden, paying scant attention to a parchment which he probably could not read, laid down his weirs and nets as before, only desisting for a time, when the sheriff of London, backed by an armed band, dropped down the river and seized (or demolished) his nets (or weirs.)

"One fight was made by the London folk, in the reign of Henry III, in behalf of sport and trade, which became famous in city story, and got a niche in every old chronicle, and in many a popular song.

"Complaints were made before Andrew Buckrell, mayor, Henry de Cotham, sheriff, and other magistrates, that many new kidels had been laid in the Thames and Medway, by authority of the tower warden, contrary to the city franchises, and to the great injury of the common people.

"More than elsewhere, this wrong was being done to them in the neighborhood of Yantlett creek.

"This was a ticklish thing; for, although the Thames lay under the jurisdiction of London, for many purposes, it was not clear that the mayor and a city band had any right to pursue offenders up the Medway, and seize them under the walls of Rochester castle. They put their right to the test. Jordan de Coventry, second sheriff, with a body of men well armed and resolute, started on the 6th of January, 1236–7, for Yantlett creek, where they fell suddenly and stoutly on the master fishermen and their servants. They found no less than thirty kidels, beyond that creek, towards the sea. With little ado, they tore up the nets and seized the masters. Joscelyn, and four good men of Rochester; seven good men of Strood; three good men of Cliff, all master mariners, with nine others, their helpers and abettors in wrong.

"Jordan brought these captured nets and culprits up to London, where

he gave the nets to the first sheriff, and lodged the master mariners in Newgate.

"When the news of this raid reached Rochester, Strood and Cliff, much din arose, and men from these towns rode up to London, to see what could be done for Joseelyn and his fellows. They applied to the King for help, on the ground that no man had power to seize the King's subjects by force, and cast them into jail, without his license. Henry inclined to take this view, but the mayor and sheriffs maintained their right to arrest offenders against the King's laws and city franchises. Being then absent from London, Henry sent a writ to the mayor, commanding him to accept bail for the appearance of his prisoners, until such time as the King could hold a court to try the case.

"This court was called in the Palace of Kennington; when Buckrell and the citizens, Joseelyn and the master mariners, appeared before the Archbishop of York, the Lord Chancellor and other great personages, among whom, the most eminent, was William de Raleigh, the famous justiciar, a collateral ancestor of Sir Walter.

"William de Raleigh, who held a brief, as it were, for the crown, put Buckrell and his men on their mettle. 'How,' he asked them, 'had they with such rash daring seized the King's liegemen in their boats and cast them into a common jail?' Buckrell answered him, 'that he had seized Joscelyn and the rest for just reasons, because being taken in the act of using kidels, (fish baskets,) they were infringing the rights of the city, lessening the dignity of the crown, and incurring the ban of excommunication in accordance with the express clause of the Great Charter. He asked, in conclusion, that the judges should enforce the law and punish the master mariners by a heavy fine.

"William de Raleigh took this view of the kidel business, and his verdict gave immense delight at Guildhall. He senteneed Joscelyn and the other masters to pay a fine of ten pounds each, the fines to be rendered to the chief men of the city.

"A great fire was lighted in West Cheape, and the captured nets from Yantlett ereek were burned in the presence of a joyful crowd."

Thus six hundred years ago it will be seen that our English ancestors, the Saxon Churls, as they were called, rid themselves of these wretched deviees, whilst our rivers are filled with them to this day.

In some few instances, suits have been brought against these unlawful traps, but, although the law is as plain and simple as language can make it, as yet there have been no convietions. Error in the mode of bringing suit seems to be the difficulty. The law is on the statute book, however, unrepealed, and it is to be hoped that punishment will yet reaeh the offenders.

I have no hesitation in saying that these fish baskets have tended more to the diminution of our fish supply than the dams themselves. The dams have, all of them, (on the main streams,) sluiceways for navigation cut through them, and it is certain that these have always permitted a small proportion of the yearly return of shad to ascend the river every spring. But the fish baskets have regularly destroyed the fry produced by the spawning of these more vigorous fish as fast almost as they came to life. Bushels of the murdered fry have clogged the fish baskets, and have to be shovelled away like dead leaves, year after year, ever since the dams have been built, and thus the fish, endeavoring even to accommodate themselves to the new and more difficult means of ascension, have been frustrated and their progeny destroyed.

It is well known that the returning shad will make almost preternatural efforts to reach the grounds on which they were spawned, there to deposit

their spawn in turn. But if the fry produced from this spawn be gratuitously destroyed, of what avail is the powerful instinct of the fish?

It is not only the shad that are reduced in number by this unfair and murderous system—all are fish that come to these nets. Every fish not thinner than, say half an inch, of what species soever, is caught in these meshes, to die and be shovelled out like so much dung into the stream.

The truth is that our fisheries have never been regulated by law. Laws have been passed but they have not been enforced. There must be a remedy for this which must be speedily sought out and put in practice.

Below the Columbia dam the system of fish basket or kiddle fishing (I adopt Webster's orthography) is carried to as great if not a greater extent. The river, for miles and miles, is studded with innumerable rocks, in every form of grouping. Many of these rocks occur in twins, with a small space between them, through which the water rushes, and there is no case of the kind which has been neglected by the kiddlers. Between these twin rocks a fish basket is certain to be found. Now, the law is, even at this moment, sufficient for their total extinction. It only requires that the people should act with a determination that they shall be ended. Nay, if the constables will simply do the duty prescribed for them by law they can be stopped.

If the grand juries would present a few of these constables for non-performance of their duties—if the judges would draw the attention of the grand juries to the subject, they can be abolished. But if the people, the constables, the grand juries and the judges all lie upon their backs, asleep in respect to these breaches of the law, do we not deserve to be deprived of our fish?

We want this reform in Pennsylvania not only for the shad. All the other fish of the Susquehanna and the Delaware would immediately increase in numbers.

Recently some enterprising private individuals have introduced the black bass into our stream, (the main Susquehanna.) These ought to be allowed some chance to increase in numbers. The Upper Potomac is full of these delightful table fish, all produced from a few thrown into the stream by a locomotive engine driver at Cumberland, who brought them in his tank from the Monongahela. The fishing in the Potomac was incidentally protected by the war—that river forming a line between the belligerents. For several years it was unsafe for individuals to appear on either of its banks. Hence there was little or no fishing on any thing like a large scale, and as for fish baskets they naturally fell into decay and disuse. The result is that the Upper Potomac teems with these excellent fish, a fish that can be taken with the hook and line even when they have reached the weight of ten and twelve pounds. If protected from this destructive system of fishing we shall have them as plentiful in the Susquehanna in a very few years. Already their progeny have become the prey of the fish baskets, however. Buckets-ful have been caught in them in the Juniata and the Susquehanna, and small boys, gamins, have filled their pockets with them and taken them home as a new fish, recently appearing in our waters, to ask pap: "Where could they have come from?" This will interest the gentlemen who paid a dollar a piece to introduce their parents alive into the river. Yet the law is sound and full. Whose fault is it if it be not observed? It is everybody's business, yet nobody's business. But everybody must watch, and inform and bring to punishment the infractors of the law or there will be no increase of fish. Our magnificent Susquehanna salmon, as it is improperly called, (belonging as it does to the perch genus,) has lately been observed to be on the increase. Why? Because, in the reach between Colum

bia and Duncan's island, many fish baskets have been, in contemplation of the law, allowed to decay. But the progeny of these are caught by the bucket-ful and used for *bait* on our upper reaches. Thus the increase is kept down by the same cause that annihilates the other tribes.

But the shad fisheries below Columbia have deteriorated very much in the last thirty years. There are not five caught now where there were a hundred in the earlier day. This is because the numbers that reach the upper spawning grounds have been reduced by the obstacles occasioned by the dams and by fish baskets.*

Maryland is riparian to both banks of the Susquehanna for about fifteen miles above its mouth, and the laws of Maryland require revision as well as our own.

It has been the prescribed duty of your Commissioner to endeavor to obtain concurrent legislation with Maryland. At the bi-ennial session of the Legislature of Maryland of 1870 he proceeded to Annapolis, and found that the subject was beginning to attract attention, the Governor (Governor Bowie) having recommended the appointment of commissioners for that State.

The Commissioner of Pennsylvania, joined by one of those from New York, (Hon. Robert B. Rosevelt,) secured the recommendations of the Governor of Maryland, and about the end of the session a law was passed, providing for the appointment of Commissioners. This law creates parties with whom to treat in the State of Maryland. Those Commissioners are required to report legislation to the General Assembly of Maryland, at its next meeting, which meeting, the sessions being bi-ennial, will not occur until January, 1872. By that time it is to be hoped that an understanding can be come to between the authorities of the two States, which carried out, will result in benefit common to both.

Concurrent legislation with New Jersey and Delaware, on the subject of the fisheries of the Delaware river, both those States being riparian to that stream, is also called for, and the subject has not been neglected. Your Commissioner proceeded to Trenton, during the session of the New Jersey Legislature of 1870, and, representing the necessity of some mutual understanding between the States, recommended the appointment of commissioners to take the subject in hand. He was aided in his representations by prominent citizens of New Jersey, interested in the fisheries, and by others anxious to place New Jersey square with the advancement of the New England and her sister middle States, in this very important material interest. The Legislature, near the day of its adjournment, passed a law for the creation of a commission, and Dr. Benjamin P. Howell, of Woodbury, and Dr. John H. Slack, of Bloomsbury, New Jersey, were soon after appointed by the Governor of that State (Governor Randolph) Commissioners of Fisheries.

In the full run of the shad season the commissioners of New Jersey and Pennsylvania met on the Delaware, visiting the tide water fisheries between Salem and Philadelphia, and gave their best attention to the very important subject before them.

A subsequent convention of the same commissioners met in New Jersey in November, and visited the Delaware river above the tide water, say from Trenton to Easton, carefully examining the obstructions, alleged and real, which existed in that reach of the river.

Most of the great fisheries of the Delaware are on the Jersey shore,

*As I write I am informed that commendable exertions have been made against the fish baskets below Columbia. My life for it, this will result in good, and its good effects be shown even upon the take of the approaching season.

though a majority of them are owned and operated by Pennsylvanians. We found that the greatest cause of complaint on the Delaware were, as on the Susquehanna, unregulated and indiscriminate gill netting in the tide water fisheries, and fish baskets or eel weirs, as they are called, and brush or fascine netting on the upper waters.

Unless fish baskets and permanent brush nets be entirely abolished, and gill netting regulated, the fisheries of the Delaware are fated to ultimate annihilation. It is only a question of time. There are three permanent structures in the upper Delaware, belonging to large vested interests, which have been much complained of as injurious to the fisheries. These are Scudder's dam, the head race of the Lehigh company's pumping wheels, at New Hope, and the inlet of the Delaware and Raritan canal feeder. We examined all these carefully, and found that they were more or less injurious. But no one of them is as bad as an ordinary fish basket, and if the two other interests follow the example of the Trenton Water Power company, who, at the Scudder's dam feeder, have adjusted across the head of the inlet a rack, pendant from a boom of logs, to be used during the fishing season and the descent of the fry—a very cheap and movable structure—the cause of complaint will be very much diminished.

It is not doubted that the great interests owning the works alluded to will, at the suggestion of the commissioners, at least endeavor to ameliorate these obstructions—seeing that they can hardly be asked to remove them altogether.*

The united commissions of New Jersey and Pennsylvania are now preparing legislation, to be offered to the consideration of both the States, during the present sessions of their respective Legislatures, which, if made law and carried out, it is hoped will retard the decline of this all important interest.

Delaware is equally interested with New Jersey and Pennsylvania, in the passage of these laws. But her sessions are bi-ennial, like those of Maryland, and 1870 was an off year, so that the appointment of a commission for that State could not be effected simultaneously with those appointments in New Jersey and Maryland.

The Legislature of Delaware is now, however, in session. Should Pennsylvania and New Jersey agree upon concurrent legislation, the same will be presented for consideration to the Legislature of Delaware, directly, with the hope that it can be passed without the aid of a commission for that State.

The inland fisheries of the whole Atlantic coast of North America, we have now ascertained, from Hampton Roads, the outlet of the Chesapeake bay, to the Gulf of St. Lawrence, all have suffered and are suffering from similar causes.

In the early settlements of the countries bordering these coasts, the fishing was so abundant, that it did not seem to be in the power of man to reduce them, and laws in respect to them seemed almost acts of supererogation. But abuses have crept in, and grown to such an extent, that even the most important of all the fisheries along the coast, bid fair to be finally consumed and destroyed.

The British provinces have given great attention to this subject, taking example from their home government, and from their neighbors in the New England States. And they already report manifest improvement in many of their fishing grounds, sufficient to afford cause for reasonable hope that

*This subject will be treated in detail, with diagrams, &c., in the report of the New Jersey Commissioners to the Legislature of that State, during its present session.

the fisheries can be brought back to their pristine plentitude. Their reports upon the marine and fisheries, published annually at Toronto, by order of the Dominion parliament, are exceedingly interesting, appearing in the form of quite a respectable "blue book."

They are sustained by all the New England reports. Wherever the subject has been taken hold of and intelligently handled, success has followed.

From the reports of the British provinces, and of all the New England States, and from what we see before our eyes, it seems to be certain, that the production of almost, if not all of our land-locked and migratory—or as it is now fashionable to call them—anadromous fish, has been reduced to the facility of a manufacture.

Ninety per cent. of the eggs of trout can be impregnated and raised to maturity, notwithstanding that it takes nearly two months to hatch them. There are establishments rising up all over the country, where trout will live, that actually succeed in that extraordinary proportion, carrying on the affair as a regular mechanical business.

Attention was drawn to this subject by the report of your Commissioner in 1869, and it seems not without some perceptible effect. Trout manufactories are springing up everywhere. All that is wanting is a spring sufficiently copious to supply three successive ponds with water, in such quantity as that the temperature of these ponds will not rise above 60° Fahrenheit, during the summer. This is a rule quite easily understood, and it must be complied with, or there will be failure.

The three ponds are: No. 1, for the troutlings—say little fellows born in the winter, who would be preyed upon by their older brothers and sisters; No. 2—trout of the second year, who, although perhaps not often preyed upon and swallowed, are a tempting morsal for the older ones, and No. 3, a pond for the mature trout—furnishing spawn for the factory, and messes for the table. In the third pond they may be let live for years, until they attain the weight of three and four pounds.

From the lower pond (No. 3) to the head of the spring there is a fish ladder constantly ready for the adults to ascend when under the influence of the propogation instinct; which, as soon as it assumes power, is invariably obeyed, and the males and females ascend to be caught in a convenient reach of the little stream, and be relieved of their respective burdens; not by the Cazarean operation exactly, as Macduff was brought into the world, so that it could not be said of him, that he was "one of woman born," but by a very gentle process of manipulation in the hands of an expert; whereby the common product of both the sexes is passed out into a tin trencher scarcely larger than a pie dish, in which impregnation of *thousands* of the *ovæ* takes place, and is effected by a mere movement of the dish similar to that which our grandmothers used to employ to cool their tea in a saucer.

In twenty-five minutes after the commixture of the milt and the roe has been effected in the dish, impregnation is certain, and the *ovæ* assumes the form of opaque amber beads about the size of early spring peas. These, so long as they preserve this orange tawney color, are known to be sound. If, however, they become in the least addled, they assume a creamy hue, and must be removed, or the mortality would spread rapidly to the healthy ones. They are then, with the utmost care, handled by extremely delicate and ingenious instruments, and ranged upon rods, a system of glass rods placed just below the surface of the water, the rods being placed near enough to each other so that the *ovæ* will not fall through. The water must be kept constantly fresh and at an even temperature between 50° and 60° Fahr.; and in fifty or sixty days the little fry breaks its shell and drops

from between the rods into the lower depths of the water in which it is free to paddle about.

For three weeks it is sustained in this water (ever running, ever fresh, pure and cool) by a yoke sack which it brings into the world out of its parent egg, and requires no other sustenance. At the end of that time, however, the yoke sack sloughs off and the perfect troutling is obliged to sustain itself thereafter.

From its cradle or crib trough it is then removed by means of fine dip nets and placed in an artificial running stream for a few weeks more, fed by its proprietor with small quantities of curdled milk or chopped liver, (calves',) until it is deemed to be strong enough to be thrown into pond No. 1; here it finds grass and "small deer" of one kind and another, and is occasionally treated to worms or other food by the owner or custodian of the ponds until the next spring, when it is transferred to pond No. 2, a respectable little "chappy" five or six inches long, full of life and animation. In No. 2 he plays about for a year with his mates, growing in vigor and size until the following spring, when he is allowed to associate with the adults in No. 3, (being somewhat too large for a mouthful,) until he is impelled by the instinct of propogation to ascend the ladder toward the place of his birth; there he and his lady love are obliged to submit to the manipulation of the expert, and he and she are returned to pond No. 3, to swim about for another year, when they again ascend the ladder toward the breeding reach.

To such perfection has this system of trout breeding reached, that, as has been stated, there are scarcely any failures. I venture to say that in an ordinary manufacture of inanimate things, say in the making of horseshoe nails, there are more individuals spoiled by accident than there are trouts or trout *ovæ* killed by the beautiful system of culture now in vogue in many parts of the United States.

This system originated in France, and has been, I think, likely, brought to its present perfection in this country. There are several establishments of this kind in Pennsylvania, and they are growing every day in numbers.

At Williamsport, in Lycoming county, they have been very successful. In Centre and in Cumberland county, also, or perhaps within the borders of Perry, an establishment has been started by Harrisburg gentlemen.

Seth Green, of New York, at Mumford, Monroe county, near Rochester, is extensively engaged in this new branch of industry. He, indeed, is one of the great lights on the subject, having received medals from foreign governments for his ingenious improvements.

Dr. John H. Slack, of Bloomsbury, New Jersey, (nearer home) has, I think, almost, if not altogether, reached perfection at his place, for his production in fish reaches, I am told, over ninety-five per cent. of the exuded *ovæ*. And Mr. Thaddeus Norris, of Logan Square, Philadelphia, is an authority that may profitably be consulted in regard to this interesting industry.

The cultivation of trout, then, may be said to be thoroughly started, and may be well left to the individual energy and enterprise of the American people—an energy and an enterprise which have never yet failed of success in whatever direction they have turned their hand.

It will not be many years until live trout will be sold from tanks in our city markets, as plentifully and as certainly as hens' eggs are now bought and sold, and the household aquariums will have hatching troughs attached for the amusement of our families, in their very sitting rooms and parlors.

The artificial propagation of shad, however, is a more important matter than that of trout or any other of the inland fish, and, so far as hatching is concerned, the success attained has been quite equal to that which re-

sulted from trout hatching. As many *ovæ* or eggs of the shad can be brought to life as of trout, say 98 *per cent.*, and by a much simpler process.

Shad has the advantage of requiring but as many hours as the trout require days for incubation. At the proper season fish, male and female, are caught and manipulated in the same way. The spawn, having been impregnated, is then placed in a floating box, with a wire screen at the bottom, and anchored so that the wire screen, being exposed to the current, the spawn are kept in gentle motion. In sixty or seventy hours the fry make their appearance and are liberated, when they immediately make for the main channels of the stream, depending, it would seem, upon their being almost transparent for safety from their many enemies.

They live, apparently, upon the microscopic productions of the water itself, until the autumn, when they, having grown to the size of five or six inches in length, they drop down stream tail foremost, until they reach the sea, where it is supposed they remain, certainly until the second, but according to some naturalists, until the third season from their incubation; then, impelled by the instinct of propagation, they return to the places where they were spawned, and in their turn produce *ovæ*, to go through the same tri-ennial vicissitudes.

Some suppose that, like certain insects, having fulfilled their instincts of propagation, they die and are devoured by the fish of prey which are always on the watch, as a sort of residuary legatees. But this would leave us no means of accounting for the large sizes to which shad have been known to grow.

The three-year-olds are supposed to reach from four to six pounds in weight, according as they may have been early spawned, and have reached the sea early in the year of their birth. But shad of eight, ten, twelve and even thirteen pounds in weight, were not at all uncommon in the old days, and such weights could scarcely have been attained in three years. *

It is certain that the lying-in of the shad is an exceedingly precarious time. Relieved of their load, they find themselves very much exhausted, and, no doubt, many of them die.

The late ones are almost sure to die, for it has been ascertained that that they cannot live in water much above 75° Fahr. But those who pass the period of parturition early, say in May or June, may, by a concurrence of fortunate accidents, be carried back to the ocean, (by a June flood, for instance,) and thus have a chance at a renewed lease of life.

The late ones, however, are extremely likely to die of what might be called puerperal atrophy. Parturition leaves them in a weak and flaccid state, incapable of exertion. The heat of the water enervates them, and unless hurried back fortuitously to the saline waters where they originally attained their growth, dissolution is extremely probable.

In the later months of the summer the dead mothers are often seen floating or half floating, amongst the young progeny which they had brought into existence, toward the estuaries of our great streams, and preyed upon by the thousand different ghoul-like smaller fry, who get their living from the decayed carcasses of the larger fellow-denizens of the stream.

Now, it has been shown that for the purpose of producing or re-producing trout, all that is required is a sufficiency of water, at an ascertained low temperature. By means of properly fenced ponds and protection from each other, more than ninety per cent. of all the eggs can be made into full

*There is at least one living witness of a fourteen pound shad, and reliable hearsay testimony up to a sixteen pounder!

grown trout. Given any quantity of pure running water, at a continuous temperature, not higher than sixty degrees Fahrenheit, and as many trout as can live in such quantity of water can for a certainty be produced. This because the trout can be confined in spaces, and saved from the natural vicissitudes through which the tribe has to pass. Hence, as has been stated, they are likely soon to become as much an article of merchandise at the shambles, all alive and kicking, as chickens or eggs.

But to this perfection we can not insure the production of shad. What we *can* do in that line, however, can be stated with equal certainty.

A mature female shad, it has been ascertained, will contain, say one hundred thousand eggs, and if she be left to herself, and the ordinary accidents attending shad birth or spawning, she will make her deposits, which, the instant they leave her body, are subjected to a thousand accidents and dangers—pisciverous speculators hanging about the spawning nest. And although she may have protected her progeny with maternal instinct, by covering them with sand or gravel until the few hours necessary for incubation shall have passed by, yet a vast proportion of them are destroyed or devoured. It is estimated that out of the one hundred thousand, at most five hundred, after having been hatched, find their way to the concealment (so to speak) of the main channel. Even these five hundred are exposssd to multitudinous dangers. Enemies lurk in every place of concealment, ready to pounce on them upon the least exposure. They are exceedingly delicate and tender. It is said that if they be deprived of a very few (not more than half a dozen) of their many scales, it is almost certain death to them, and hence, when drawn into a fish basket, the mere shock of striking against the slats kills them.

Beset as they are with all these dangers, it is fair to estimate that not over one hundred of the one hundred thousand reach the ocean; and one hundred to a single mother who has spawned, might be esteemed a fair average product.

But now, let us see what artificial culture will do. Instead of five hundred being liberated in the main channel, no less a number than ninety-eight thousand young fry have been sent out swimming from the hatching box. Let these be reduced by the same dangers and accidents after they have reached the mild stream, in the same proportion as the five hundred are estimated to have been reduced, and instead of one hundred from one mother reaching the sea, we have no less a number than nineteen thousand six hundred from a single ventre. This shows that the breed of shad can be indefinitely multiplied, and that if anything like fair play is shown, the streams can be re-stocked, even beyond their former fruitfulness.

But a fish basket is a contrivance that catches every thing which the stream lets float into it, alive or dead, that cannot pass through its meshes. The pickerel—the cat fish—the rock fish—the eel—the bass—all the pisciverous tribes together, in the largest conceivable numbers, cannot destroy as many of these unfortunate shad fry as the murderous fish basket. They clog up the meshes, and have to be shovelled away by the bushel—by the cart load, if there were carts to take them.

Compromise baskets have been made, the meshes three-fourths of an inch apart, the corners bevelled, etc., etc., but notwithstanding all this, fish basket or kiddle—thy name is *murder*. The tender shad fry, even having passed through the mesh, if it shall have scraped its little body in the least, is sure to die. It cannot part with a scale on its way to the sea, without endangering its existence. The fish basket, then, must simply be abolished, or, as Magna Charta has it, "demolished." It is the common enemy, and all good citizens should make war upon it.

The Delaware fisheries are as much injured by the fish baskets and permanent fascine, or brush nets, as those of the Susquehanna.

The convention of the Pennsylvania and New Jersey commissions, after diligent inquiry, found that the very same complaints exist on that stream. They found, even amongst the proprietors of fish baskets, a growing and healthy opposition to them. Many of these honest men testified that they would be glad if they were abolished, but so long as they were permitted they saw no harm in keeping up their own.

Quite an improvement was observed in the run of shad on the Delaware in the spring of 1870. Fish were caught higher up the stream than they had been for years, and shad spawned in the upper reaches of the Delaware beyond the New York State line. This shows that all that is required is proper regulation of the inland fisheries by law, and all will yet be well, for, with our power of propagation, we can supply any reasonable falling off, occasioned by a poor season, or any other natural reduction of quantity.

I applied to the fish commissioners of New York for any suggestions they might have to make in reference to the Susquehanna or the Delaware rivers, seeing that the Empire State was riparian to the upper reaches of both these streams. They replied that they were satisfied with the exertions which were being made by us in the lower reaches, and that whatever improvements we made would, in the end, benefit them. That when the shad began to return to the extreme northern reaches, in Pennsylvania, of those rivers, it would be time enough to look toward concurrent legislation, as between New York and Pennsylvania.

That shad will eventually be caught, both on the Susquehanna and on the Delaware, within the New York line, I have not any doubt—but the Augean stables must first be cleansed.

The experience of all the New England States, and of New York, in reference to their inland fisheries, is precisely analogous with our own. Fishing has been practiced in all their streams as if the supply was infinite and inexhaustible. There has been no law, or if laws have been passed, they have not been observed. The splendid Connecticut, the mighty Hudson, have both had their fisheries so much depleted that fear of actual annihilation has induced the riparian States to pause and deeply consider the subject. We, delayed as we have been by the necessity of long legal inquiries, by divided riparian ownership, and by the bi-ennial sessions of the Legislatures of co-riparian States, have not lost by this delay. Several of the States north of us have invested considerable sums in the artificial propagation of the anadromous tribes, and with apparent success, too, for the catch in the Connecticut of 1870 outnumbers any catch for twenty-five or thirty years. On the Connecticut, the first or about the first artificial hatching was inaugurated three years ago, and it is the belief of all that the catch of this last year, 1870, is the result of that plant.

How can it be otherwise, when, by the artificial process, you can give life to the spawn and set swimming in the stream nearly one hundred thousand shad minnows for a bare five hundred or a thousand brought to life under the maternal fins.

On the Hudson, the pioneer shad producer, Seth Green, has been now employed for two years sending out millions upon millions of these little denizens at the expense of the State of New York. We shall assuredly get returns from these hatchings in due time; it is believed that three years will tell the story. That period *has* told the story on the Connecticut, and similar results are confidently expected on the Hudson; but in the meantime the lower Hudson is clogged by systems of fishing inimical to the in-

crease due to that splendid river. There is a sort of impounding practiced there which takes all the fish of all sizes that enter within the pound or enclosure. The smaller and growing specimens are not merchantable, and are therefore lost as food, and lost as to their propagating powers to posterity. The New York commissioners actually dread the total destruction of the Hudson fisheries unless the laws be thoroughly revised and enforced, and abuses which have been gowing for ages be put an end to.

There are thousands of men about the New York bay who gain a precarious and scanty living by these injurious methods of catching fish. The prejudices of this class of men are to be fought and overcome; all fishing must be placed on a fair and proper basis; wholesome laws must, as I say, be enacted and enforced, and our experience will prove to be the same as those of the European countries which first took up this subject. The fisheries have improved both in quantity and quality wherever they have been brought under the action of judicious and salutary law. The practices and prejudices of years must first, however, be uprooted.

We have suffered in the Delaware and Susquehanna both, from similar causes; and legislation will be suggested to the riparian States during the present sessions of their respective Legislatures, looking toward a more hopeful system, and drawn up, after due reflection, upon the experience of the States who have, as yet, instituted commissioners and reformed the laws on this important subject; legislation, it is to be hoped, which will meet the approbation of the bodies to whom it shall be submitted, and which will result in rehabilitating our grand fisheries.

Pennsylvania possesses the largest portion of the two most important shad breeding rivers in this continent; they are the greatest and the best. Let us clear them of their obstructions first, and then follow the example of New York and the New England States in propogating the anadromous fishes.

A private experiment will be tried with salmon, on the Delaware, as soon as *ovæ* can be procured. Dr. Slack, of New Jersey, one of her fishery commissioners, and an enthusiastic culturist, has promised to let a few thousand salmon into our great eastern stream, at his own expense. We shall know whether he succeeds or not in three years from the hatching of the fry.

Should we succeed in obtaining concurrent legislation with Maryland, in respect to the Susquehanna, the State can then open a dam or two on that river and its tributaries, and commence propagating like her neighbors of New England.

It will not be worth while, however, until the stream shall have been thoroughly freed from obstructions. The Delaware may be practised upon in the same way, in which there is no permanent obstructions for over two hundred miles above Philadelphia, shad having been spawned above Deposit, in the State of New York, during the season last past.

If, against the thousand temporary impediments, natural and artificial, these fish can penetrate to such a distance, what will be the result when the young shad shall be increased in production many thousand fold, and they shall be protected, not to prohibition, but within fair bounds of regulation? There is no reason why shad should not be re-produced in these streams to an extent greater than they were ever known before. Salmon even may yet be introduced, and, if with success, what a blessing.

And now as to other fishes. We have disposed of trout; that has already become a recognized industry, and though not yet fully developed, full development is within every man's ken, and will soon be effected; and unless trout in a man's aqueous closes are still regarded as *feræ naturæ*, and liable to be taken by any passing angler without let or hindrance, I

know of no law required for the protection of this industry. If this be the case, however, legislation should change it, and an invasion of a man's ponds should be made a trespass *quare clausum fregit*, as the invasion of his orchard or other curtilage is now. This subject is being inquired into, and will receive attention in the legislation to be submitted for consideration during this session.

The most popular fish now to be found in the upper reaches of the Susquehanna is the pike perch, (called erroneously Susquehanna salmon,) a superb table fish, (superior to the famed moscalonge of the St. Lawrence,) which is almost banished from our boards from the effects of fish baskets and other unfair modes of fishing. All Pennsylvanians, of the interior, know this fish and must appreciate its very great value if it could again be made plentiful. Then we have the yellow perch, a very fair pan fish, which has re-appeared above the Columbia dam within a few years. Then the Susquehanna eel, of which about a ton were caught in a fish basket last season, above Harrisburg, destroying, probably, about the same weight of small fry of other species. It is true that the eel is a preying fish, and watches the shad breeding process, devouring all he can capture. But this is natural, and it was so in the early day, when shad used to be caught here, four and five thousand at a haul. I am not afraid of eels, they are so pleasant for the table that their numbers will be reduced in fishing. Then we have the rock fish, the cat fish and the sun fish, besides others. All these, were our laws properly observed, would increase and multiply. It seems a wonder that they have been so reduced, but fish baskets catch everything, great and small, and considering this, the wonder ceases.

A fish, called black bass, was introduced a year or two ago from the Potomac, which originally came from the Ohio waters. Some gentlemen in Harrisburg let loose just five dozen of them. These are increasing. At Newport, in Perry county, last spring, as has been stated, the boys discovered a number of their dead fry in the fish baskets near there, and brought them up to the village as curiosities, to ascertain from their adult friends from whence they came. I wonder how the gentlemen will like this, having paid about a dollar a piece for their progenitors? Large individuals of this colony have been caught in various localities and let loose again. They are a hardy fish, and know well how to take care of themselves, and they will increase and multiply, if protected. They have been also introduced into the Juniata, the Delaware, and into the Schuylkill. About a thousand were let loose near Easton last fall. There is scarcely a more interesting hook and line fish known than these black bass, and they are a great dainty for the table.

They, like the eels, are also said to be pisciverous by some, though it is denied by others; be it as it may, though I think the weight of authority is that they are not voraciously pisciverous; but, be it as it may, if we catch them catching our shad, we will catch them, and some folks say they are as nice a table fish as the shad themselves. I think, then, that both in the Susquehanna and the Delaware the black bass should be protected. And the New Jersey commissioners, although originally and even now distrustful of them finding Massachusetts and Pennsylvania less alarmed upon the subject, have gracefully yielded their objections and will recommend protective laws. I do not fear the natural enemies of the shad; it is the practical devices of man that I dread the most. Let our streams be regulated and policed, and no crusade need be made against any particular tribe.

Regular sea salmon are to be tried, as has been said, in the Delaware, and Dr. Slack, of New Jersey, writes me that he is in treaty to obtain some

spawn of another very fine variety—the land-locked salmon, evidently of the salmon tribe, but which does not appear to be anadromous.

These are found in the St. Croix, one of the most northerly of our rivers, bounding Maine and the British possessions. It is like the black bass in size, and sometimes attains the weight of ten pounds.

The New England commissioners have been hatching at it for two or three years, and New York also is trying to transport it. Conceive how our rivers would be improved could we fill them with such splendid angling fish as these, the sea salmon, the black bass and others, which we need not "count" until there is some hope of their being "hatched." Yet other States and nations have so improved their fisheries and why not we?

The Delaware and the Susquehanna are the two most extensive and favorable streams for fine inland fishing on the Atlantic slope of our continent. Their upper reaches, both, in the olden time, produced the finest shad known to the coast, and in the greatest abundance. They can both be made again to teem not only with shad, but certainly with black bass, with pike perch, with eels, rock fish, yellow perch, sun fish, &c., and probably with sea salmon and land-locked salmon. There is nothing required for this except a few well considered statutes, and the certainty of those statutes being executed. Our two great streams, however, have diverse riparian municipal interests. New York and Maryland border portions of the Susquehanna; New York, New Jersey and Delaware border portions of the Delaware.

Our statutes, to be of avail, must be concurrent, and as some of these States have bi-ennial sessions of the Legislature, it will take time to make the legislation homogeneous. Our energies must, however, be directed so that the laws must be the same for all the riprarians and must be fair to all. Fortunately the best laws that can be passed favor all interests. Interests which at first may seem to be oppressed will at last be benefitted. This is no mere prognostication; it is the truth, ascertained by experience. The reports of the fishery commissioners of all States in which they exist are full of such experience, and a firm execution of the laws must not, therefore, be shrunk from.

There are those who sneer at the idea of fish-ways and fish-ladders. Our fish-way at Columbia is considered a humbug. Since it has been formed I think it can be proved that no season has passed in which there were not at least five thousand shad caught above it, and those shad must have worked their way through some aperture or other.

Since it has been formed no season has passed in which, in the autumn, thousands upon thousands of small shad fry have not been caught in the kiddels and fish-baskets, all located above the fish-way, and their mother's must have got up through some opening. If not through our fish-way, then how?

But if no fish pass through ours, there are plenty of them in New England through which they can be seen passing any day in the season. If ours is not as good as theirs (and I think it is better, because our dam is so much lower) then let us make fish-ways like theirs. A Pennsylvania shad can swim as well as a Yankee shad, and let us make our ways like the Yankee ways when the time comes. That ways can be made up which shad can pass is as certain as that there are "holes" in rooms made by "carpenters" through which men and women can pass. But you can't have your cake and eat it if you kill your young shad in fish-baskets as they go down the river. I admit that *those* cannot make their way back over a fish-ladder whether Yankee or Pennsylvanian.

The fish ways are the smallest of our difficulties. Let us regulate our

fishery laws, and there will be no trouble about the fish getting over the dams.

The Delaware is not interfered with by dams at all for two hundred miles or so above tide, yet in the upper reaches the fishermen consider shad fishing an industry of the past, and hope to supply the place of the lost tribes by the introduction of black bass.

Our people shall have both, and in the greatest abundance; but a healthy public sentiment must be cultivated and established; the fisheries must be regulated; we must follow in the train of our European ancestors. They lost their fish as we have lost ours, and have regained and their sons are regaining them very fast. We shall succeed equally well with our cousins. We never yet have competed with them in any way without holding our own, or beating them, and it will be so in respect of our fisheries.

In New England a great interest has sprung up in favor of the restoration of the fisheries. Scores, perhaps hundreds, of small independent fish culture establishments have come into existence and are succeeding. Shad, salmon, land-locked salmon, black bass, and even lake trout have been hatched and set free. The catch of shad last season in the Connecticut was better, as before stated, than it has been for twenty or thirty years, which season being the third from the time of the first artificial supply, the increase is justly attributed to that method of hatching. Prejudice is dissolving, as it always does when combatted by quiet persistence in the right cause.

New York has not been behind Massachusetts in the good work. Vast numbers of shad have been artificially hatched in the Hudson, during the last two seasons, and set free. There has not been time for results, but the Hudson has been fished with extreme irregularity, and its vast supplies have been reduced by the same lack of economy which has weakened our fisheries in the Delaware and in the Susquehanna. Laws opposed to this system, or no system, have been passed in New York, and the fishermen are beginning to believe that a well regulated order of things will bring around prosperity again. They submit cheerfully to all reasonable ordinances.

Over the territory of the New England States, and of New York, numerous lakes are to be found. All these are great resources of fresh water fish, of which new varieties are being continually introduced and with uniform success.

The States have ownership in these lakes, and a system of leasing them to private parties has been commenced. In Massachusetts the State has domain in every pond greater than twenty acres in area, and these she has commenced to profit by through these leases.

A similar system will, no doubt, be inaugurated in New York, the Empire State possessing a very large share of these inland reservoirs.

In Pennsylvania we have very few lakes—so few that it is believed that all have been merged in the patents issued by the State, so that they are mostly, if not all, private property. The innumerable branches of our grand water courses, and our few lakes, may then be said to be held by the riparian proprietors. This will not prevent their productiveness as fisheries.

The system of fish culture is making such headway, and is becoming so popular, that the capacity of all our interior waters will, at last, be availed of by the owners, and we shall have fresh fishes in great variety, as plentiful with us as the most richly endowed of our neighbors. Well considered laws of general application, with an occasional deviation to satisfy the conditions of peculiar localities, should be passed *and observed*, and all will be well.

The New York Fish commissioners have applied to the Central Park commissioners, and have received permission to add to the Zoological department of the Park, the hatching and culture of fishes. From this arrangement there is much to be expected. All varieties of inland fish that will flourish in this climate will be hatched in the waters of the Park, and citizens from all parts of the United States will constantly receive information on this subject, as a consequence of this judicious and liberal policy.

Our duty in Pennsylvania is very simple. We have the two queen streams, within and upon our borders, for anadramous fish, in the United States. Let us join with the other States riparian to these great rivers—let us pass concurrent laws—fair to all—beneficial to all honest fishermen and honorable sportsmen, and afterwards "keep" them, to use a Scriptural phrase. Our people are becoming more and more alive to the subject. At the recent convention of the Pennsylvania and New Jersey commissioners an offer was made by private gentlemen, through Mr. Thaddeus Norris, that if the Delaware were cleared of piratical fishing, they, at their own expense, would try the artificial hatching of shad for a season. When the streams are cleared, however, and further favorable reports continue to come up to us from the east and from New York, it will be perfectly safe for the State, following the example of her neighbors, to plant these migratory fish in these rivers, for two or three consecutive seasons, with a certainty of success, leaving it to private enterprise to introduce the landlocked tribes, which only require protection from piracy to multiply indefinitely from very small beginnings. The five dozen black bass planted by Harrisburg gentlemen, a couple of years ago, have already produced shoals of minnows of their species, which are now being sacrificed in the kiddels. The Potomac, as has been seen, was filled with them for two hundred miles of its length, from a single mess brought over in the tank of a locomotive from the Monongahela. Let us protect these enterprises, and they cannot fail of success.

The New Jersey and the Pennsylvania commissioners have convened three times during the last season, and will, very shortly, suggest legislation, the result of the most careful inquiry and reflection on this subject, regarding the Delaware. The same will be presented to the Legislatures of Pennsylvania, New Jersey and Delaware for consideration. It is to be hoped that the wisdom of these bodies will produce a uniform system common to all, and of service to all. Until the legislation is homogeneous and concurrent, there is but small chance of improving our fisheries.

Concurrent legislation on the subject of the Susquehanna is necessarily delayed until the meeting of the Maryland Legislature, which will not take place until next winter. Let us then dispose of the Delaware this year, if practicable, leaving the Susquehanna till Pennsylvania and Maryland can act together, as Pennsylvania, New Jersey and Delaware can act this year, providing they can agree.

Let our two grand rivers be first rehabilitated. Their tributaries will, thereafter, almost regulate themselves.

The great movement has commenced. Let the streams be prepared. First by protection from piracy, then by opening the dams. Let artifical hatching then be inauguarated and the fisheries of these rivers will yet rank amongst the most valuable of these material interests.

I have the honor to be,
Sir, very respectfully,
Your obedient servant.
JAMES WORRALL,
Commissioner, &c.

APPENDIX.

As judicial decisions *seem to* differ in different States, the Pennsylvania case is here reported in detail, and a brief of the Massachusetts case is given.

THE COMMONWEALTH OF PENNSYLVANIA, *vs.* PENNSYLVANIA CANAL COMPANY. } In Dauphin County Quarter Sessions.

HISTORY OF THE CASE.

On the 31st day of July, 1857, the State of Pennsylvania conveyed to the Pennsylvania railroad company, the main line of the public works, including the dam across the Susquehanna river, at Duncan's island, in pursuance of the provisions of the act of May 16, 1857, providing for the sale of the main line. This act required the purchaser to keep up certain specific portions of the line, as a public highway forever, but gave no authority to the railroad company, which became the purchaser, to sell the works.

Afterwards, on the 30th day of March, 1866, the Legislature of Pennsylvania passed a general public act, entitled "An Act relating to the passage of fish in the Susquehanna river and certain of its tributaries;" requiring all persons or corporations, having and maintaining any dam, or dams, or other artificial obstructions of whatever kind, then or thereafter constructed, in said river and certain tributaries named, to make, maintain and keep up, in each of said dams or obstructions, a passage way for fish, upon a plan to be furnished by a commissioner to be appointed for this purpose by the Governor; providing for the indictment of such persons or corporations as should neglect or refuse, after the following November, to comply with the law, being duly notified and furnished with such plan by said commissioner.

Subsequently, on the 1st day of May, 1866, the Pennsylvania canal company was chartered by the Legislature, and authorized to purchase these works from the railroad company, which was in the same act authorized to sell them to said canal company.

The sale and purchase were made; and the canal company failing to comply with the law requiring a passage to be made for fish, was indicted under the provisions of the act, appeared and pleaded not guilty; and the jury found the following special verdict, upon which the court entered judgment for the defendants, and the Commonwealth thereupon sued out a writ of error.

SPECIAL VERDICT.

The jury find that on the 11th day of April, 1825, an act was passed by the Legislature of the State of Pennsylvania, entitled "An Act to appoint

a Board of Canal Commissioners," providing *(inter alia)* that the Governor be required to appoint five Canal Commissioners, and defining their duties, *prout* said act, made part of this special verdict, and contained in pamphlet laws of sessions of 1824–5, beginning on page 238. That on the 25th day of February, 1826, an act was passed, entitled "An Act to provide for the commencement of a canal to be constructed at the expense of the State, and to be styled the Pennsylvania canal," authorizing *(inter alia)* said commissioners to immediately locate and construct a canal, and locks and other works necessary thereto, from the river Swatara, at or near Middletown, to or near to a point on the east side of the Susquehanna, opposite the mouth of the Juniata river, as in said act provided; *prout* the same contained in pamphlet laws of session 1825–6, beginning on page 55, and made part of this special verdict. That on the 9th day of April, 1827, an act was passed, entitled "An Act to provide for the further extension of the Pennsylvania canal," providing *(inter alia)* that said Canal Commissioners should, as speedily as may be, locate and contract for making a canal, locks and other works necessary thereto, up the valley of the Juniata, from the Eastern section of the Pennsylvania canal, to a point at or near Lewistown, as therein provided; *prout* said act contained in pamphlet laws, session of 1826–7, beginning on page 192, hereby made part of this special verdict. That by virtue of the act first above referred to, and its various supplements and substitutes, the said Board of Canal Commissioners continued to exist until the year ——. That the said dam and structure in the indictment in this case mentioned and described, was constructed and erected by said Board of Canal Commissioners, at the expense and cost of the State of Pennsylvania, long prior to the year 1857, to wit: On or about the year A. D. 1826, and as one of the necessary works connected with the construction of the Pennsylvania canal, as above provided; and that said dam thenceforth continued and still continues to be used as a part of said canal.

That on the 16th day of May, 1857, an act was passed, entitled "An Act for the sale of the main line of the public works," which provided for the sale *(inter alia)* of the canal mentioned and described in the foregoing acts as the Pennsylvania canal, as therein set forth, which act, contained in the pamphlet laws of 1857, beginning at page 519, and an act, entitled "An Act relating to certain canals," contained in the pamphlet laws of 1864, page 725, are hereby made part of this special verdict; *prout* the same.

That in accordance with said act of May 16, 1857, the said canal *(inter alia)* was purchased by the Pennsylvania railroad company, and a deed was executed and delivered to said company therefor, as provided in section 7 of said act; *prout* said deed hereby made a part of this special verdict, the same being dated July 31, 1857.

That on the first day of May, 1866, an act was passed, entitled "An Act to incorporate the Pennsylvania canal company," which act contained in pamphlet laws for 1866, beginning at page 1068, is hereby made a part of this special verdict.

That in accordance with the powers conferred by said act, the said Pennsylvania railroad company, on the 30th day of March, A. D. 1867, sold and conveyed the line of said canal from Columbia to Hollidaysburg, to said Pennsylvania canal company, as by said deed recorded in the office of the recorder of deeds, in and for the county of Dauphin, in Deed Book C, vol. 4, beginning at page 156, will fully appear; *prout* the same, hereby made a part of this verdict. That on the 30th of March, 1866, an act of the Legislature was passed, entitled "An Act relating to the passage of

fish in the Susquehanna river and certain of its tributaries;" which act contained in pamphlet laws of 1866, beginning at page 370, is hereby made part of this special verdict; *prout* the same with the supplement thereto, passed April 13, 1867, and contained in pamphlet laws of 1868, page 79, *prout* the same. That James Worrall was duly appointed Commissioner, by the Governor, as provided by said act and said supplement, and entered upon and performed the duties devolved upon him by said appointment, under said act and supplement, and did, within the time limited and designated in said act, fix and designate the location of the wiers, steps, sluices and other devices for the free passage of fish up and down said river and through the dam and obstruction, in the indictment in this case mentioned and described, and did furnish working plans of the same to the owners thereof, to wit: the defendants herein, and did in all things observe, perform and conform to the provisions and requirements of said act and supplement.

That said defendants have not hitherto made said sluices, wiers or other devices, or any sluices, devices or ways for the free passage of fish up and down the said river, through said dams and obstructions in the indictment in this case mentioned, according to the plan furnished by said commissioners or otherwise, but that said dam and obstruction remain in the same condition, in all respects, in which it was before the passage of said act of March 30, 1866, and is an obstruction to the free passage of fish and spawn up and down said river.

If the court, upon the facts stated, should be of opinion that the defendants are guilty in manner and form as they stand indicted, then we find defendants guilty, and judgment to be given accordingly; if not guilty, the verdict and judgments to be for defendants.

OPINION OF THE COURT.

By the court:—The State of Pennsylvania, about the year 1827, constructed a dam across the Susquehanna river, at Duncan's island, for the purpose of feeding its canal, then about to be completed, and kept it up to supply the public works with water until the year 1857, when the whole right of the State was conveyed absolutely to the Pennsylvania railroad company by deed, pursuant to the provisions of the act of May 16, 1857. That company made use of the dam for the same purpose, until it sold and transferred all of its interest in the property, from Columbia to Hollidaysburg, including the dam *now* in dispute, to the Pennsylvania canal company, in pursuance of the act of May 1, 1866, by which that company was incorporated, and authorized to make the purchase. The Susquehanna is one of the great rivers of Pennsylvania, navigable by nature, and over which the State has exclusive control by virtue of its right of eminent domain. The claims of riparian owners to its shores run no further than ordinary low water mark, and between that and the high water boundary, the public has the right of free passage, and the State the privilege of taking possession at any time without making compensation to the land owner, who has but a qualified property in the intermediate space.—*See* 1 *Penna. R.*, 467; 1 *W. & S.*, 346; 6 *W. & S.*, 112-13-14.

The dam was, therefore, the absolute and unqualified property of the Commonwealth, which by its deed, made in pursuance of the act of 1857, conveyed all of its rights therein to the Pennsylvania railroad company on the 31st day of July, of the same year. The act of Assembly authorizing this conveyance, is most full and ample, only reserving the power in the State to revoke the grant for misuse or abuse of the privileges granted after a *judicial decree* of such misuse or abuse first duly had and obtained.

The railroad company to which this sale was made, held a charter from the State, granted in the year 1846, in which there is no power of change or revocation reserved, consequently it was then and still continues beyond and above legislative control. The State has precisely the same power over property granted to a corporation, that it has over a like grant to a private individual—no more—no less.—6 *Howard*, 533. Thus stood the right to this feeder dam on the 30th day of March, 1866, when the act relating to the passage of fish in the Susquehanna river was passed, under which the indictment in the present case was preferred. The act of Assembly last referred to, requires every individual or corporation having or maintaining any dam, weir or other obstruction on the Susquehanna and its various branches, including the Juniata river, to maintain and keep up at each of said dams, wiers or other artificial obstructions, a sluice, weir or other device for the free passage of fish and spawn up and down said stream, in such manner, and on such plan, as a commissioner to be appointed by the Governor may devise. Working plans are to be furnished by the commissioner who is to inspect the dam, immediately after the 1st of November next, following, and if the device shall not have then been constructed as prescribed, the commissioner is to report the delinquency to the district attorney of the proper county, who is to cause an indictment to be preferred against the delinquent corporation or individual. The failure to erect and keep up devices in the dams, in the mode prescribed by the commissioner, is declared to be a misdemeanor, and the dam a public nuisance; the violaters of the law are subjected to a heavy penalty, and if the work be not completed within thirty days, the dam is to be abated by the sheriff at the cost of the individual or corporation offending. The Pennsylvania canal company, under its purchase from the Pennsylvania railroad company, made on the 30th day of March, 1867, has kept up the dam and neglected and refused to make the sluices as required by the act of Assembly, and consequently was indicted at the November term of court of Dauphin county, and a true bill found on the 21st day of that month.

A special verdict was taken, embracing every fact necessary to raise the legal positions presented on the argument, which we will now proceed to consider. The defendant answers that the statute under which it is indicted was repealed by the act of April 13, 1867, which provides that the several provisions of the second section of the act, entitled "An Act relating to the passage of fish in the Susquehanna river and certain tributaries," approved March 13, 1866, be and the same are hereby continued to the 31st day of December, 1866. On looking into the provisions of the second section thus referred to, we find that certain of its enactments expired in effect on the first Monday of December, 1866—as the duty of the commissioner for instance. If that officer had failed to fix the width of the weirs, steps or sluices, or determine their location on the various dams, to furnish the working plans on which the sluices were to be constructed, to obtain the approval of the Governor thereto or to inspect the same and report the delinquency to the district attorney, the power on the part of that officer had ceased, and it was the intention of the Legislature to prolong it by the act of 1867. The statute is hastily and carelessly drawn; but by applying its words to the provisions of the act of 1866, which had expired, we do not infer the absurdity to the Legislature of intending to continue provisions which had not expired, to wit: the power to indict or punish for keeping up that which the law declared a nuisance, and concerning which the enactment is perpetual. It is our duty to so construe the laws as to prevent an absurdity. This can readily be done in the manner indicated, and such

is the obvious meaning of the act. Apply the maxim, *reddendo singula singulis*, and the two laws may well stand together. Had the act expired as assumed, the legal position that the indictment must fall would have been clearly tenable, for if the law expires or is repealed before indictment, there can be no prosecution, or if after conviction sentence cannot be pronounced. It is scarcely necessary to cite authorities for so plain a position; but we find them in 1 Binney, 601; 1 Wh. R., 460; 1 Wash. C. C. R., 84; 10 Watts, 351; 8 Smith N. Y. R., 95. It also urged that as this law is highly penal in its character, it must be strictly construed, and is *ex post facto* in its operations, punishing that which was lawful at the time it was passed. This statute does not pretend to punish the defendant for erreting the dam, it was lawfully built by the State, and kept up by it and the Pennsylvania railroad company for nearly forty years before this defendant had existence as a corporation. The law does not declare the *erection* unlawful, but forbids the keeping up of the work after the owner has been furnished by the commissioner with the plan devised for the passage of fish, without making the sluices, &c., as required by the statute. It is the failure to make the change after due notice which is declared to be a public nuisance and keeping up the dam in contravention of the legislative command.

It is said that the act of Assembly is in violation of the State and National Constitutions in this: That it impairs the obligations of a contract, between the State and the Pennsylvania railroad company, entered into when the State sold its works; violates the charters, both of that and the canal company, by imposing burdens on them, which neither their charters nor the laws of the land require them to bear, and takes private property for public use, without paying or securing any equivalent. To this it is answered by the Commonwealth that, as the Susquehanna was by nature a public navigable river, the people on its banks had an inherent right of free fishing, which could not be impaired or taken away. That the State possesses the right of eminent domain for the benefit of the people, and cannot part with, sell or abandon it. A charter granted to a corporation is of no greater efficacy, or of more binding obligation, than a deed to an individual; and its franchises are subject to the power of eminent domain, and are under the control of the Legislature; that there is no taking of this property; and even if *taken*, it does not impair the contract. The point mainly relied on in response to the defence is, that this law is an exercise of police power, which the State possesses over all persons or property within its borders, is held for public benefit, and cannot be parted with or abandoned; and lastly, that the exercise of the right complained of is not a violation of the *words* of the Constitution, and before a law can be declared void by the courts on account of impinging with the organic law, it must be clearly so, and come within the prohibition of the very letter. It would be a waste of time, at this day, to argue that a grant is a contract executed, and the property once granted cannot be resumed by the State, without the consent of the grantee. It is equally useless to cite authority to prove that the charter of a corporation cannot be revoked, or altered, against its consent, unless when the power of revocation or alteration is reserved in the grant, in general laws previously passed and applicable to their incorporation, or in the Constitution itself. If the State has in the mode prescribed by law granted a tract of land to an individual for a valuable consideration, it cannot, by law, revoke the grant and resume the property; and even when taken for necessary public purposes, must pay the owner a full equivalent. The same rule applies, both to the franchises and property of a corporation. In the present case the State, for a full and valuable consideration, granted and conveyed its canal and railroad

improvements to the Pennsylvania railroad, a corporation over the charter of which it had retained and possessed no control whatever. That company had held and enjoyed the property for about nine years, when the act of 1866, relating to the passage of fish, was passed. By that law the Legislature attempted to impose on this company the burden of changing all its dams from, and including the one in controversy, up to, and along the Juniata to Hollidaysburg, so as to secure the free passage of fish through all the dams; some twenty-six in number; and the expense of making the directed alterations, it is said will amount to over two hundred thousand dollars, independent of the cost of keeping them in repair. These alterations in the dams, it will be borne in mind, are not for the benefit of the present owner, which will, it is said, be greatly injured thereby in the loss of the necessary supply of water for its canal, but is intended for the benefit of the people at large, and the riparian owners in particular, by securing an abundant supply of fish. We would naturally conclude that in such a case the expense of these alterations should rather be borne by the public at large, or the persons who are to be especially benefitted, than by the purchaser for value, who is to receive no benefit, but will be essentially injured by the change. It is said, however, that there is no *taking* of the property of this corporation under the statute, and therefore it cannot claim the protection of the constitutional prohibition. Although the dam in question is not *taken*, the money of the owner must be to a very considerable amount before the alterations and improvements required by the statute can be completed. It transcends the power of the Legislature to throw such a burden on its grantee. When the Legislature incorporated a company to make a bridge with a draw of thirty feet, it was decided to transcend the power of the Legislature to require the draw to be extended to fifty feet.—18 Conn. R., 54. Also held that a railroad company could not be obliged to make bridges for county roads across their track when the charter contains no such obligation.—2 Barber, 513. Franchises cannot be changed without the consent of the corporators, properly expressed. The Legislature cannot interfere with corporate property or franchises.—Brown *vs.* Hummel, 6 Barr, 86. When no power is reserved for the Legislature to alter the charter it cannot be done, nor can additional burdens be thrown on it without the consent of the corporators.—Com. *vs.* the Monongahela Nav. Co., 6 Barr, 379. See also Harrington's R., 389, 9 Cranch, 292; Dartmouth College *vs.* Woodward, 4 Wheaton, 518, and numerous other cases. But wherefore investigate these decisions when we have an authoritative exposition of the constitutional power of the Legislature, made in a very recent case by our Supreme Court, which is binding on us as an inferior judicial tribunal, and which we have neither the legal power nor inclination to disregard.

The State of Pennsylvania, some years since, donated the canal extending from the mouth of the Beaver to the city of Erie to a company incorporated to receive, complete and keep it up. The charter required the company to maintain farm bridges; but no mention was made of those on the public streets and highways. The State had built, and was accustomed to keep up those bridges. Some in the borough of Meadville fell into decay and were re-built by the town authorities, which sued the canal company for the expense thereof; but it was decided that the corporation law did not require it to keep up these bridges.—See Meadville *vs.* Erie canal company, 6 Harris, 66. In 1864 an act was passed requiring the company to build and keep up the bridges on the public streets and highways; which the corporation refused to do, and was sued by the city of Erie for the expense incurred in re-building those in that city. But it was held by

Judge Derickson, on full consideration in the court of common pleas, that the Legislature had transcended its power in passing the law; and the judgment was affirmed by the unanimous opinion of the Supreme Court, in a most lucid argument by Judge Sharswood.—See the City of Erie *vs.* the Erie canal company, 9 P. F. S., 174. That was a vastly more favorable case for the exercise of legislative power than the one before us. There the State had originally built all of the bridges on the streets and highways, including those in question, and had always kept them up. The canal was *given* to the company by words of equivocal meaning, but probably intending to bind the company to do the same thing, but not so expressed. Here the public works of the State were sold to the Pennsylvania railroad company for seven million five hundred thousand dollars. The dam was built, and had always been kept up by the Commonwealth, without any sluice, causeway or other device for the passage of fish, as had all of those embraced in the act of 1866, which the railroad company was required to change at its expense. There was an apparent fairness in the law relating to the Erie canal, as it only required the donee of the State to do what the donor had always done whilst it held the property. There is nothing but unmitigated hardship and injustice in the act of 1866, which obliges a purchaser, for value, to do what the vendor had never done when it built, or whilst it owned and kept up the dams by virtue of its sovereign power. The purchaser had a right to expect it would be permitted to use and enjoy the works as they had always been held and enjoyed by the State, without expense or molestation by the legislative authority. It is said, however, that the State can cause the dams on the river and its branches to be changed or even vacated by virtue of the right of *eminent domain*, an attribute of sovereignty vested in every government for the benefit of the people, and which can neither be parted with or abridged. There is no doubt of the power of this Commonwealth over the public rivers within its borders, and it was by virtue of its sovereignty that it took possession of the Susquehanna, the Juniata and other streams, and obstructed them with dams for what it considered the benefit of the people, although thereby the passage of fish was prevented, and the fisheries destroyed. But it also sold the whole works for what was considered the public good. The dams became, after such erection and sale, private property, and if now taken under the power of eminent domain for public use or benefit, it must be done on paying the owner an equivalent.

The present law proposes nothing of the kind, but on the contrary requires the corporation to make all of the changes and keep them up at its own expense. This transcends sovereign power. It is prohibited by the Constitution. The State might as well undertake by legislation after it had parted with its land to A. for a full consideration, and conveyed it in all the forms of law, to transfer it over to B., and compel A. to make a conveyance, or after it had thus parted with its property, oblige A. to build a church or school house for public benefit on the land at his own expense. One of the highest attributes of sovereignty, and most essential to the existence of the State, is the power of taxation, yet that may be released for a consideration, and cannot be resumed without the consent of the grantee. *See New Jersey vs. Wilson*, 7 *Cranch*, 164; *Gordon's appeal tax court*, 3 *Howard*, 133; *Bank vs. Knox*, 16 *Howard*, 369; *Idem* 416–432, *and many others to the same effect.* This is the settled law as declared by the highest judicial tribunal in the country—the Supreme Court of the United States.

It is further contended that the State can compel the holder of these dams to fit them for the passage of fish by virtue of its police power; the alteration being of great public benefit and necessary for the welfare of the

people. This power is very extensive in preventing nuisances of almost every kind, as removing noisome smells, offensive trades, dangerous explosive substances, that which is deleterious to health, or dangerous to the lives of the people. The interment of the dead in a great city has been forbidden, although the corporation was expressly created for that purpose, and endowed with the authority to use the location.—*Coates vs. the City of New York*, 7 *Cowen*, 585. Every right is granted under the implied condition that it shall not injure others.—*Idem* 605. It has been held in several of the States that a railroad company could by law be obliged to fence its road, although no such power was retained in the words of its charter, the same being necessary for public safety and that of the neighboring stock running at large.—*See* 12 *Indiana R.*, 3; 16 *Indiana*, 84; 27 *Vermont*, 140. The corporation was subject to police regulations, and may be obliged to enclose its track under the penalty of paying for all cattle killed or injured.—25 *Illinois*, 140; 28 *Illinois*, 284–290. The road takes nothing by inference or intendment, and may be obliged to do whatever the public good requires unless expressly exempt by its charter.—27 *Vermont*, 140.

The right of control over the waters of the State has perhaps been carried further as a police power in the State of Massachusetts than in any other, where the common law prevails, and that whether the franchise was in the hands of an incorporated company, or the property and privileges were claimed by a private individual. The common law may have been changed to some extent by early custom, or the power over the streams of water secured to the public by provincial legislation; for we find it decided as early as 4 Mass. R., 528, that where permission was given to the owner of land to build a mill, as early as 1633, and he was granted a several fishery, the Legislature could require him, after the expiration of a hundred years, to make a passage for the fish, and when badly done to re-build it at the expense of the owner. The whole subject underwent careful examination in the Commonwealth vs. Alger.—7 Cushing, 534, 101. It was held that the right of free fishing and navigation was a public right, and could be controlled by legislation, although private rights were injuriously affected, (see also 4 Pick., 460, 462, 5 Pick., 199,) and a man may be prohibited from moving timber or gravel from his own land, if by its removal the public is likely to be injured; although by such prohibition the land is greatly lessened in value.—4 Met., 55. On the other hand, it was decided in Virginia, that when permission was given to an individual to erect a dam, in the mode prescribed by law, which was done, and long enjoyed, that it transcended the power of the Legislature to compel the owner, at a late day, to erect a lock therein for the passage of boats at his own expense; 6 Randolph, 245, considered with great care. So in the State of New York, the People vs. Platt, 17 John, 195, where land was granted covering a stream not naturally navigable, the Legislature cannot impose burdens on the owner of a dam erected thereon before the passage of the law declaring it a highway, without making or providing for compensation. It is impairing the grant, which is in violation of the contract. If a private stream is made navigable, the Legislature cannot appropriate it to the public without compensation.—Angel on Water Courses, 601, § 539; 27 Fairfield Maine R., 81, and after granting it to an individual, cannot divest his right, without compensation, by declaring it a highway. It has long been considered the law of Pennsylvania, that when the line of survey runs across streams of water, and the owner of the land erected a mill dam on the stream, he could keep it up, without molestation, after the Legislature had declared the creek or river a public highway, and the owner could not be obliged to fit his dam for the passage of boats and rafts; but if done, it must be at the public

expense. Such owner might as well be required to remove bars, rocks or drift wood for the convenience of navigation, by virtue of the police power, as to fit up a dam so erected. The case has been likened to that of paving and side-walks in cities, or opening streets at the expense of lot owners; all of which has been sustained by our courts—See Schenley vs. the City of Allegheny, 1 Casey, 128; also 3 Watts, 592; or compelling a borough to pay more than its proportion towards the erection of a court house.—7 Harris, 258. But it must be borne in mind that in each of these cases the owner was benefited, or supposed to be, and therefore payment was lawfully enforced.

The Legislature professes, and has always exercised unlimited control over municipalities, and the citizens thereof who, by uniting with larger bodies, bring themselves and their property under management for the benefit of the whole. As we understand the police power of the State, which has been strongly pressed upon us as being unlimited and uncontrolable, and which no State can part with, it is nothing more than the authority to compel all owners of property to so use their own, as not to injure others; that, therefore, the State cannot, by contract or otherwise, part with the power to compel the owner of real estate so to use it as not to endanger the public health or safety. This is, perhaps, the extent to which writers on that subject press the doctrine.—See Cooley's Const. Lim., 282–3. Idem, 276–7–8. But if it can be invoked for the purpose of enabling a State to revoke its grant, violate its contract, or take the property of an individual for public or private use, without making compensation, it is a most dangerous power, and enables the Legislature to do that which is expressly forbidden by the Constitution. Our only reason for examining the subject at such length is, that the authority has been strongly pressed, and it has been urged that the exercise of the power has never been presented to or commented on by the courts of our State on any of the decided cases. We are well aware that no law can properly be declared unconstitutional, unless it clearly violates the provisions of the organic law. But, as we understand this enactment, it takes the property of this corporation, defendant, for public use, without paying any equivalent, and clearly alters the character of the contract made with the railroad company at the time of the sale; in legal effect, violates the contract, and changes the charter of the company to which it sold; an act which transcends its power. It is very true that the present defendant was incorporated since the amendment of the Constitution, which gives the Legislature the power to change and modify the charters of incorporate companies at its pleasure; provided, in its opinion, no injustice will be done to the corporators. But, it will not be pretended that the Legislature, by the act of the 30th of March, 1866, undertook to construe or modify the charter of the Pennsylvania canal company, which had no legal existence at the time, but was incorporated on the 1st of May, 1866, and secured a transfer of the works from the railroad company on the 30th day of March, 1867. The whole act of Assembly, in relation to the passage of fish, is aimed at the railroad company, over the charter of which the Legislature had no control whatever.

We are aware that our decision will be a great disappointment to the people who ardently desire, and fully expected an ample supply of fish by the change of these dams. We are of the opinion that the alteration can be made if the same is deemed useful, but it must be done at the public expense; the defendant cannot be obliged to bear the burden. It is our duty to declare this act null and void, so far as it imposes on this company the

duty of changing the dams at its own proper cost; and we therefore render judgment in favor of the defendant on the special verdict.

JNO. J. PEARSON.
President Judge.

SPECIFICATIONS OF ERROR.

1. The court erred in directing judgment to be entered for defendant on the special verdict.
2. The court erred in not directing judgment to be entered for the Commonwealth on the special verdict.

ARGUMENT FOR THE COMMONWEALTH.

The facts of this case are so fully found in the special verdict, and so clearly stated in the opinion of the learned judge of the court below, that they need not be recapitulated before being used for the purpose of this argument.

The special verdict shows that the Pennsylvania railroad company, on the 31st day of July, 1857, received from the State a deed of conveyance of the public works, known as the Main Line, including the dam mentioned in the verdict, having become the purchaser thereof at the sale made in accordance with the provisions of the act of May 16, 1857.

The first question which arises in the case is, as we conceive, did the railroad company, by this purchase and deed, take the right to sell said works to the Pennsylvania canal company, the defendant in this case?

Before attempting to answer this question, it may not be out of place to state briefly, and in the language of this court, the well settled principles on which contracts between the State and individuals or corporations are construed by the courts. In the Southwark railroad company *vs.* the city of Philadelphia, 11 Wr., 323, Agnew, J., says: "Many of the cases were examined and the doctrine summed up by Justice Woodward in the Iron City Bank *vs.* the city of Pittsburg, 1 Wr., 340, wherein he states 'that a grant of land or of a corporate franchise by an act of legislation, is a contract between the State and the grantee, the obligation of which a subsequent legislature cannot impair.—P. 347.'"

"This being the admitted principle, it becomes a question of interpretation only, and the point is, what contract did the State make" with the Pennsylvania railroad company in this case, when she granted and sold to them the main line of the public works?

"Before solving this it is necessary to state the rule which must guide the interpretation in this case. It is one well settled in the courts of the United States and of this State. In the case of the Charles River bridge *vs.* the Warren bridge, 11 Peters, 544, Chief Justice Taney, following the language of an English decision, stated the rule to be 'that any ambiguity in the terms of the contract must operate against the adventurers and in favor of the public, and the plaintiff can claim nothing that is not clearly given them by the act.' In the Susquehanna canal company *vs.* Wright, 9 W. and S., 11, Chief Justice Gibson re-states the rule, as decided in the Monongahela navigation company *vs.* Coon, 6. W. and S., 113, to be 'that the State is never presumed to have parted with one of its franchises in the absence of conclusive proof of such an intention.'"

"Chief Justice Black afterwards stated the rule in these words: 'If anything is settled it is this rule of construction, that a corporation takes nothing by its charter except what is plainly, expressly and unequivocally

granted.'—Bank of Pennsylvania *vs.* Commonwealth, 7 H., 155. In the Commonwealth *vs.* Erie and N. E. railway company, this rule is still more strongly stated.—3 Casey, 359."

In accordance with this principle of interpretation it will certainly not be pretented that the right of the Pennsylvania railroad company to sell these works would be implied in the grant of them to be maintained and kept open as a public highway, as required in the act; unless there be an express grant of the right to sell it did not exist; and we submit that there is none such. It is true the third section of the act authorizes the purchasers, being individuals, to assign and transfer their right, after the sale, to the said main line, under said purchase, to any railroad or canal company then incorporated by the laws of this Commonwealth, but the provisions as to compliance with the terms of sale by such company clearly show that this meant a transfer of the right to the purchase before the execution of the deed. Again, in section five there is a proviso that "the purchasers may grant, sell, convey or lease any *part* or *portion* of said canals, and any corporation or association of individuals authorized by the act to purchase the whole may purchase or lease a part;" but this was evidently intended to enable the purchaser, after the sale, to convey or lease a *portion* of *said canals* to some one or more of the companies to whom the act gave permission to buy the whole at the sale, and could not be construed into a permission to sell the whole or even a part to a company not then in existence, and which had not authority to buy.

We conclude, therefore, that the railroad company had not, on the 30th day of March, 1866, the right to sell these works, at the least not to the defendants who were not then in existence. "Thus," in the language of the court below, "stood the rights to this feeder dam on the 30th day of March, 1866, when the act relating to the passage of fish in the Susquehanna was passed, under which the indictment in the present case was preferred." The railroad company at this date had the right to hold, keep up and maintain this dam and the rest of the work as a public highway forever, but had not the right to sell either, and these defendants had no right at all, not even the right to exist.

This act of March 30, 1866, entitled "An Act relating to the passage of fish in the Susquehanna river and certain of its tributaries," is a public general law, and requires every individual or corporation having or maintaining any dam, weir or other obstruction on the Susquehanna and its various branches, including the Juniata river, to maintain and keep up at each of said dams, weirs or other artificial obstructions, a sluice, weir or other device, for the free passage of fish and spawn up and down said stream, in such manner and on such plan as a commissioner, appointed by the Governor, may devise. Working plans are to be furnished by the commissioner, who is to inspect the dam immediately after the first of November next following; and if the device shall not have been constructed as prescribed, the commissioner is to report the delinquency to the district attorney of the proper county, who is to cause an indictment to be preferred against the delinquent corporation or individual.

After the passage of this act, namely: On the 1st day of May, 1866, the canal company, defendant in this case, was incorporated, and in the act incorporating it, authority was given it to buy, and to the railroad company to sell, said works, including this dam. The companies respectively accepted, and acted under the authority so given; and by virtue thereof the railroad company sold, and the defendants bought, said works. The defendants having so bought, and "having and maintaining" the dam, neglected or refused to make and keep up the passage for fish, required to be made and

kept up by said act, whereupon the steps pointed out by the law were taken, resulting in this indictment and special verdict.

The defendants claimed that to enforce this law against them would be to impair the obligation of the contract between the Commonwealth and the Pennsylvania railroad company, and that, therefore, as to them the law was unconstitutional and void, and the court below so decided.

This court will see from the opinion, that the learned judge treated the case as though it were a question between the Commonwealth and the railroad company. In this we think there was manifest error. The rights of the railroad company were not involved, there was no charge against them, they were not parties to the case, nor liable over to defendants, nor could they be in any way affected by the verdict and judgment. But the ground of the claim seems to be, that as the railroad company bought from the State, without being subject to any burden or reservation as to the altering of the dam, and the canal company purchased from them, they also took with an immunity from the imposition of any burden, and that they succeeded to the contract between the State and the railroad company as it stood in 1857.

Conceding for the present that the railroad company, if they had continued to hold the works, could not have been forced to comply with this law, we think it by no means follows that the canal company can plead the same immunity. All the former company had, as we have already seen, was a right to hold and a duty to keep open the works; this was the extent of their contract with the State. When, subsequently, the additional privilege of selling was granted, the Legislature had the right to impose upon that privilege any burden they saw fit, and they did impose, by the prior law, on which the indictment in this case is founded, upon the right to sell and upon the power to buy, the burden and duty to be performed by the purchaser, of making a passage for the fish in the dam. The rights acquired under the original contract with the State are not affected by this act. The railroad company was not bound to accept the privilege of selling, but when they did, they accepted it subject to the law as it then stood.

And this appears still more clearly when we view it in relation to the defendants. They were not in existence when the act under which they are indicted was passed; they had no rights; the grant to them of the right to purchase, as well as to exist, came afterwards, and they surely cannot complain of any burden being imposed upon them, when they were entirely free to accept the grant with its privileges and burdens, or to decline it altogether. This only they could not do: accept the privileges and decline the burdens.

These principles seem to have been decided by the Supreme Court of the United States in the case of Armstrong vs. The Treasurer of Athens county, 16 Peters, 281. In 1804 lands set apart by Congress for a university in Ohio, were vested in a corporation with power to lease the lands at certain rents, and to increase the rents, from time to time, to the amount of any taxes imposed on any similar property, and declaring that the lands should forever be exempt from all State taxes. In 1826 the corporation was authorized to sell the lands, nothing being said in regard to taxes in the act authorizing the sale, yet the United States Supreme Court held that the lands in the hands of purchasers were not exempt from taxation by the State. The court say: "The purchasers had no connection or privity with the act of 1804, they could claim only by force of the act of 1826, authorizing the corporation to sell;" and they distinguish this case from the earlier one of New Jersey vs. Wilson, 7 Cranch, 164, which decides that certain lands which had been granted to the Stockbridge Indians, free from

taxation, could not be taxed in the hands of purchasers from the Indians. The court say in that case that the State of New Jersey might have insisted on the surrender of the privilege of exemption from taxation as a sole condition on which a sale of the property should be allowed, but not having done so, and it being for the benefit of the Indians because of its enhancing the value of the land, the court held that this exemption ran with the land.

In this case we submit that the State, by the passage of the act of March 30, 1866, did insist that the privilege of holding this dam free from legislative control should be surrendered as a condition of the grant of the power to the railroad company to sell; and that the canal company can claim only under its charter granted subsequent to, and therefore subject to the act of March 30, 1866.

We do not know that it is necessary, yet we recite a few cases to show that corporations are subject to the provisions of general laws in force at the time they obtain their charters.—Pratt *vs.* the Atlantic and St. Lawrence R. R. Co., 42 Me., 579; Bowen *vs.* Sears, 5 Hill, 221; Bank *vs.* Nolan, 7 Howard, (Miss..) 508; Bank *vs.* Archer, 8 Smedes and M., 151; Coffin *vs.* Rich, 45 Me., 507.

And to the general laws passed subsequently, if they do not conflict with the clearly expressed or necessarily implied provisions of their charter.—Easton bank *vs.* The Commonwealth, 10 Barr, 442; Providence Bank *vs.* Billings, 4 P., 514; Iron City Bank *vs.* The City of Pittsburg, 1 Wr., 340; Norris *vs.* Andriscroggin Railway, 39 Me., 293; Railway *vs.* Smith, 37 Me., 35; English *vs.* N. H. and Northampton Co., 32 Conn., 240.

When damage had been done by the erection of a dam by a corporation, for which they were not liable under their charter, which contained no reservation of power to alter and amend, and afterwards the corporation accepted a supplement containing such reservation, they were held bound by a subsequent act requiring them to pay for damages previously done.—Monongahela Nav. Co. *vs.* Coon, 6 Barr, 379.

Applying, then, the settled principle of the strict construction of grants and charters from the State to the charter of the canal company defendants, we contend that they took their charter subject to the provisions of the general law, on which the indictment in this case is based, which had been previously enacted, and was in full force at the time defendants acquired their charter; and that there is nothing in its provisions which impair the obligation of any contract between them and the State or between them and the railroad company. They took the right to exist and to purchase these works subject to the duty imposed by a previous general law, upon whomsoever should maintain any dam in the Susquehanna river, to construct thereon a passage for fish, as described in the act; and having voluntarily taken the privileges granted them by law, they cannot complain of the burdens annexed to these privileges.

The principle that corporations take their charters and grants from the State, subject to the provisions of existing laws, is a necessary deduction from the settled meaning of the term "obligation," as used in the Constitution. "The obligation of a contract consists in its binding force on the party who makes it, and this depends upon the laws in existence when it is made; these are necessarily referred to in all contracts, and form a part of them as the measure of the obligation to perform them by the one party and the right acquired by the other."—Cracken *vs.* Hayward, 2 Howar 612; Ogden *vs.* Sanders, 12 Wheaton, 259; See opinions of Washington, Thompson and Trimble, J. J., in this case. Also Pomeroy's Const. Law, pp. 382–8; Cooley's Const. Law, pp. 285–6.

"The law must have a present effect upon some contract in existence, to bring it within the plain meaning of the language employed. There would be no propriety in saying that a law impaired, or in any manner whatever, modified or altered what did not exist. The most obvious and natural application of the words themselves, is to laws having a retrospective operation upon existing contracts; and this construction is fortified by the associate prohibitions: 'No State shall pass any bill of attainder, *ex post facto* law or law impairing the obligation of contracts.' The first two are confessedly restricted to retrospective laws, * * * and no good reason is perceived why the last should not be. No one supposes that a State Legislature is under any restriction in declaring, prospectively, any acts criminal which its own wisdom and policy may deem expedient. And why not apply the same rule of construction and operation to the other provision relating to the rights of property?"—Johnson, J., Ogden *vs.* Sanders, 12 Wheaton, 303.

"There is (as stated by Black, C. J., in Sharpless *vs.* Mayor of Philadelphia, 9 H., 164) another rule which must govern us in cases like this, viz: 'That we can declare an act of Assembly void only when it violates the Constitution *clearly*, *palpably*, *plainly and* in such manner as to leave *no doubt* or hesitation on our minds. This principle is asserted by judges of every grade, both in the Federal and in the State courts; and by some of them it is expressed with much solemnity of language.'—6 Cranch, 87; 4 Dallas, 14; 3 S. and R., 178; 12 S. and R., 339; 4 Binney, 123. A citation of all the authorities which establish it would include nearly every case in which a question of constitutional law has arisen. I believe it has the singular advantage of not being opposed even by a *dictum*."

And in determining whether an act of the Legislature is constitutional or not the court must look to the body of the Constitution itself for reasons. The general principles of justice, liberty and right not contained or expressed in that instrument are no proper elements of a judicial decision upon it.—*Ibid.*

But it is contended, by the defendants, that to compel them to obey this law would amount to a taking of their private property for public purposes without compensation. To this we answer, in the first place, that their property is not "*taken*," they are not "deprived" of it. The meaning of the Constitution, on this point, has been settled; and it has been universally interpreted to be "a taking altogether, a seizure, a direct appropriation, dispossession of the owner."—Sharpless *vs.* The Mayor, 9 H., 166–7, and cases cited. And in the next place, if it be claimed that the money which it would cost to construct the passage for the fish is taken, we answer that this is part of the price which the defendants pay for the works; they took them by permission of the State, subject to the condition that they would construct the fish-way, and it is part of the obligation of their contract with the State, which they are bound to fulfil. Moreover money can never be the subject of "taking," in the constitutional sense, because, if taken, it must be with compensation, which could only be made by returning the exact sum taken, and this would render the taking a nullity.

We respectfully submit that the case of the City of Erie *vs.* the Erie canal company, 9 P. F. S., 174, does not, as will no doubt be contended by the defendants in error, at all conflict with our view of this case. That ruling is based upon the fact stated by Justice Sharswood, in delivering the opinion of the court, that "in the act incorporating the Erie canal company there was no power reserved to the State to alter or modify its provisions;" hence, the Legislature could not do this by a law passed subsequently. But in this case the law claimed to be enforced was passed prior to the act of

incorporation of the canal company, and as we contend they took their franchises, including their *right* to buy, as well as the property purchased subject to the prior law. If we are correct in this, that case has no bearing on this question.

We are aware that the fifth section of the act to incorporate the Pennsylvania canal company provides, that "all acts or parts of acts of the General Assembly of the Commonwealth, inconsistent herewith, be and the same are hereby repealed." But we do not think it can be successfully claimed that the act of March 30, 1866, is "inconsistent" with the act chartering the canal company, or that a general public act would be repealed by a private act in this indirect manner.

The People vs. Platt, 17 Johns R., 195, is an authority in our favor. The court base their decision in that case entirely on the fact that the river Saranac is not navigable, and that it was the private property of the defendant Platt, "as high up as salmon ascend." Spencer, C. J., says, p. 215: "I am sensible that the Legislature has passed many laws regulating the slope of dams to facilitate the passage of fish; but what are the particular circumstances of the rivers, in regard to which these laws were enacted, I am uninformed; *it may be that they are navigable for boats, and then no objection could be made to such acts.* In the present case the river Saranac is not capable of being used as a passage way for boats *or water craft of any kind.* It has been granted and thus has become *private property* as high up as salmon ascend. *The fishery itself* has passed by these grants." The right of fishing for salmon in this stream being vested exclusively in the defendant as far up the stream as the salmon ever went, neither the public nor any individual had any right above his dam; necessarily the judgment must be for him.—See Gentile *vs.* The State, 29 Ind., 409.

The case of Crenshaw *vs.* Slate River company, 6 Randolph, 245, cited and relied on by the court below, we do not think analagous. It was an attempt to force a private citizen, at his own expense, to make and keep up an artificial navigation on a stream which had never been navigable, and the bed of which was his own private property. This appears from the opinion of Justice Coulter, pp. 281-2. He says: "This case simply presents the question, whether the owner of a mill can be thus disturbed, he having erected the mill under an order of court, duly granted in the year 1802, to him who holds under a patent of a very early date granting the land, not bounded by the stream of water, but running across it so as to convey it, water and all, so far as such a patent can convey the public right to the water, of a stream, too, on which there never was any ordinary navigation, and on which, particularly at this place, *extraordinary* navigation cannot exist, without the aid of dams of some kind, and perhaps of the very kind of that now erected, and in which the claim of the public to this extraordinary navigation has been asserted long after the mill was so erected." In other words, the stream was not navigable at all without the dam; the defendant in this case had built the dam and thus created the navigation, and the law attempted to require him, in addition, to make and maintain a lock in his dam, that the public might be able to use the navigation thus created by him, and the court very properly decided that this could not be done.

The case of the Washington bridge company vs. The State, 18 Conn. R., 53, is clearly distinguishable from this case. "That was," says Church, J., delivering the opinion of the court, "an information or writ of *quo warranto* presented by the State's Attorney against the Washington bridge company, not prosecuted on the ground that the defendant's bridge is a public nuisance, obstructing the common and free use of the Housatonic river as

a navigable stream; but the point of grievance complained of is, that the company have disregarded a resolution of the General Assembly of May, 1845, and have thereby forfeited their chartered rights." This brought the case directly within the protection of the Constitution against impairing the obligation of contracts. The law was aimed directly at the very essence of the contract of the company with the State; that they should have a corporate existence and franchise; and it attempted to deprive them of this, not because they obstructed navigation which was not pretended, but because they did not increase the draw of their bridge from thirty-two to fifty feet, in obedience to a resolution of the General Assembly.

But we contend that the act of March 30, 1866, is constitutional, and hence that the judgment of the court below in this case should be reversed on another ground; that the passage and enforcement of it is a proper and legitimate exercise of what is usually styled the police power of the State, which is thus defined by C. J. Redfield, in Thorpe *vs.* Rutland and Burlington R. R. Co., 27 Vt., 149: "This police power of the State extends to the protection of the lives, limbs, health, comfort and quiet of all persons, and the protection of all property within the State according to the maxim *Sic utere tuo ut alienum non laedas;* which being of universal application, it must, of course, be within the range of legislative action to define the mode and manner in which every one may so use his own as not to injure others." By this "general police power of the States, persons and property are subjected to all kinds of restraints and burdens, in order to secure the general comfort, health and prosperity of the people of the State, of the perfect right in the Legislature to do which no question ever was, or upon acknowledged general principles ever can be made, so far as natural persons are concerned." And it was said by this court in Railway Co., *vs.* Gilliland, 6 P. F. S., 452, that "Corporations as well as individuals, by the principles of the common law, are bound so to exercise their rights as not to injure others. The principle *Sic utere tuo ut alienum non laedas* is of universal application." We respectfully submit that the right of free fishery, which is vested in all the inhabitants of the State, is a right of such importance and value to the health and prosperity of the citizens of the State at large, as to bring it within the class of rights which may be defined and protected by this police power. The right to fish in such rivers as the Susquehanna and Delaware belongs to the public.—Carson *vs.* Blazer, 2 Binney, 475; Shrunk *vs.* Navigation company, 14 S. and R., 71. It is subject to be regulated by the State on this principle; Moulton *vs.* Sibley, 37 Maine, 472; Denham *vs.* Lamphen, 3 Gray, 268. This has been done from the earliest times down to the present in this State; Hart *vs.* Hill, 1 Wharton, 132. And in many of the other States; Angell on Water Courses, (6 Ed.,) sect. 86.

In the case of the Commonwealth *vs.* Tewksbury, 11 Metcf., 55, the court held that a statute which imposed a penalty on "any person who shall take, carry away or remove any stones, gravel or sand from any of the beaches in the town of Chelsea," passed for the purpose of protecting the harbor of Boston, extended as well to the owners of the soil as to the strangers, and was not such a taking of private property for public use as to render the act unconstitutional, though no compensation was provided for the owners.—Shaw, C. J., says: "All property is acquired and held under the tacit condition that it shall not be so used as to injure the equal rights of others, or to destroy or greatly impair the public rights and interests of the community under the maxim of the common law—*Sic utere tuo ut alienum non laedas.*"

So in Coates *vs.* The Mayor, 7 Cowen, 585, it was decided: That though

the city had granted certain premises for the express purpose of interment of the dead, a by-law, passed under authority granted by the Legislature, prohibiting such interment without providing compensation, was constitutional, and could be enforced. And this, though the city had given a covenant for quiet enjoyment to the owner.—Brick Church *vs.* The Mayor, 5 Cowen, 538. So it has been held in numerous cases, that the Legislature have the constitutional right to require existing railroad corporations to fence their track, and to make them liable for all beasts of burden killed by going upon it. Thorpe *vs.* Rutland and Burlington R. R. Co., 27 Vt., 156, and many other cases cited in Cooley's Const. and Stat. Limitations, p. 579, 580.

The States, in the exercise of their police power and for the general good, may pass laws which if based on any other ground would be repugnant to the Constitution of the United States and the laws of Congress passed by its authority.—See Gilman *vs.* Philadelphia, 3 Wallace, 730; and see remarks of Clifford, J., p. 743; Cooley's Const. and Stat. Limitations, 584 to 597.

It was contended by defendants in the court below, that the act under which they were indicted had been repealed by the act of April 13, 1867, continuing in force the provisions of the second section of the act of March 13, 1866. The argument is, that as the second section was re-enacted, having expired by the limitation contained in it, the other sections, which were not limited, were repealed. The learned judge of the court below has so fully and clearly answered this position, as well as the contention that the law is *ex post facto* in its operation against defendants, that we are satisfied to rest these points on what he has said, with the single additional remark, already made in another connection, that the law was passed before defendants came into existence.

F. CARROLL BREWSTER,
Attorney General.
J. W. SIMONTON,
ROB'T L. MUENCH,
Counsel for Plaintiff in Error.

COUNTER STATEMENT OF DEFENDANT IN ERROR.

There were two indictments in the quarter sessions of Dauphin county, on which true bills were found on November 21, 1867.

The charge in each case was for alleged nuisance. The indictments were Nos. 36 and 37, November sessions, 1867. The first being against the Pennsylvania railroad company, and the second against the Pennsylvania canal company. The charge in each case was that the defendants were guilty of a nuisance, in neglecting to alter the dam over the Swatara creek where it empties into the Susquehanna river, in one instance; and in neglecting to change the dam at Clark's Ferry, in the other, in compliance with the provisions of the act of March 30, 1866, "relating to the passage of fish in the Susquehanna river and certain of its tributaries." On the 25th of January, 1868, a jury were called and sworn in both cases, who found a special verdict, printed in the paper book of plaintiff in error. The questions presented on this special verdict were argued before the court below, on the 3d Monday of December, 1868, at which time a judgment for the Commonwealth was not pressed against the railroad company. It was admitted that the company held the dam free from legislative control, and

that it was not subject to the alleged charge of nuisance, for failure to comply with the terms of the act of March 30, 1866, which imposed new burdens, not part of the contract with the State under the terms of the act "for the sale of the main line of the public works." The case against the railroad company being abandoned, the opinion of the court was filed on the 15th February, 1869, in the proceeding against the canal company, and the same day judgment was entered on the verdict in favor of the defendant in that case.

The history of the case as given by the plaintiff in error is erroneous, in stating that the law of May 16, 1857, for the sale of the main line, "gave no authority to the railroad company, which became the purchaser, to sell the works."

The third and fifth sections of that law expressly confer the authority on the purchaser to sell the whole, or any part, of the canals.

The history of the case is defective, also, in omitting all reference to the act of 13th April, 1867, which is a supplement to the act of 30th March, 1866, and limits the duration of the second section of the latter to the 31st of December, 1867.

BRIEF ARGUMENT FOR DEFENDANT IN ERROR.

1. It is now claimed by the council for the plaintiff in error, that the learned judge of the court below erred in treating this case as though it were a question between the Commonwealth and the railroad company. Conceding that the railroad company could have continued to hold the works without being subject to the provisions of the act of March, 1866, they argue that it does not follow that the canal company can plead the same immunity, because the latter company purchased the canal from the former after the passage of the law imposing the burdens, and further, because the canal company was not in existence when the act under which it is indicted was passed. We think the plain reading of the "act relating to the passage of fish in the Susquehanna river" settles this case beyond all controversy. It is clear that the Pennsylvania canal company, incorporated as it was after the passage of that statute, is not embraced within the corporations mentioned in the act, and that no proceeding can be maintained against it for violating a law which it was not bound to observe. It is a fundamental principle that no person or corporation can be compelled to do what the law does not require. The nature of legislative power limits the exercise of it. All statutes not of doubtful meaning are to be construed from the words used. All penal statutes are to be strictly construed. Let us see what this highly penal statute of March 30, 1866, says:

"That it shall be the duty of such person or persons, corporation or corporations, having and maintaining any dam or dams, weir or weirs, or artificial obstructions of what kind soever, now constructed, or which may have and maintain dams, weirs, et cetera, as aforesaid, which may hereafter be constructed on the Susquehanna river, to make, maintain, &c." The quotation just referred to follows the enacting clause, and enumerates the persons or corporations which the act was aimed at. All the other references of the act refer to this part of the first section as describing the "persons, companies and corporations" embraced within it. The defendant was not in existence at the date of the passage of the act. It neither had nor maintained "any dam or dams, weir or weirs, or other artificial obstruction," because it was not in existence. It did not purchase the canal with its appurtenances until just one year after the passage of the act under which these burdens are said to be imposed. It is not charged

in the indictment stated in the special verdict, neither was it pretended on the argument of the case in the court below, that the defendant constructed any dam, weir or other artificial obstruction on the Susquehanna river, at Clark's Ferry, after 30th of March, 1867, or after the passage of the act of the 30th of March, 1866. If it did not maintain the said dam at the time of the passage of that act, and if it has not constructed it since, is it embraced within the terms of the statute? We respectfully submit that it is not. While we have full faith that this is the proper construction of the act referred to, and that the court of last resort will so say, as the case involves the existence of the canal, we will briefly submit our views, and the authority upon which we rely, on the other questions raised in the case.

2. It is submitted that even if this view is wrong as to the persons or corporations embraced within the letter and spirit of the act of March, 1866, that that statute is no longer in force, and was not at the time judgment was entered in this case, by reason of the passage of the act of 13th April, 1867, which provides, "That the several provisions of the second section of the act, entitled 'An Act relating to the passage of fish in the Susquehanna river and certain of its tributaries,' approved March 30, 1866, be and the same are hereby continued to the 31st day of December, 1867." The second section of the act of 1866 is the vital part of it, and that on which the prosecution in this case is based. The act of 1866 having thus expired by the limitation fixed in the act of 1867, no further proceedings could be had thereunder. Assuming that the act had expired, this position is conceded by the court below, in the opinion filed.—Road in Hatfield township, 4 Y., 392; United States *vs.* Passmore, 1 W. C. C. R., page 84; 4th Dallas, 372; North Canal street road, 10th Watts, 351; Stœver *vs.* Immel, 1st Watts, 258; Commonwealth *vs.* Duane, 1st Binn., 601, &c.; Commonwealth *vs.* King, *et al.*, 1st Whar., 448 and 460; Hastings *vs.* The People, 8 Smith (N. Y.) Rep., 95, 106, 107.

3. It is further contended that the act of 1866 is an *ex post facto* law, and for that reason unconstitutional. It makes that a criminal offence, and indictable as such, which when originally done was no offence at all. The dam was constructed by the State in 1826, more than forty years before the finding of the indictment, and for aught that appears, and as matter of fact, has remained substantially in the same condition ever since.

4. The act of March 30, 1866, impairs the obligation of a contract by imposing obligations different from those contained in the original contract without defendant's consent. The Pennsylvania railroad company was a corporation created under a law of this State, and purchased the main line of the public works, including the dam mentioned in the verdict, on the 31st of July, 1857, under the provisions of the act of May 16, of that year.

This act was a contract between the State and the railroad company, by which it and its *successors and assigns* acquired the entire right of the State to the main line and all its appurtenances. It expressly authorized the purchaser "to grant, *sell and convey*, or to lease for a term of years, upon such conditions as may be agreed upon, *any part or portion of said canal*, and any corporation or association of individuals authorized by this act to purchase the whole, may *purchase* or lease such portions and hold the same, subject to the conditions, and entitled to all the privileges contained in this act." And in the third section it is declared "that it shall be lawful for any person or persons, or railroad or canal company now incorporated, *or which may hereafter be incorporated* by and under the laws of this Commonwealth, to become the purchasers of the said main line and public works."

So much, and only so much, in answer to the labored argument of the learned counsel for the plaintiff in error, that the canal company had no right to purchase, and the railroad company no right to sell, save under the act incorporating the former.

It being apparent, therefore, that the railroad company had the right to sell to the canal company, and actually did sell, the latter thereby acquired all the rights possessed by the former under the act of 16th of May, 1857.

The act of May 1, 1866, incorporating the Pennsylvania canal company, provided that in case of a purchase of the canal from the Pennsylvania railroad company, it should take it "with all the powers, privileges and franchises granted, or intended to be granted, and subject to all the requirements and conditions of the act of May 16, 1857, under which the Pennsylvania railroad company purchased the public works, so far as the same were applicable to and for the uses and purposes of the canal." The act further provides "that the canal company, in case of a purchase, should be required to keep said canal in good, navigable condition during the season of navigation."

Substantially the same duty was imposed on the railroad company by the fifth section of the act of 1857.

It is plain, therefore, from these statutory provisions, that the canal company assumed the same duties and responsibilities as the railroad company, and no others.

"A railroad company is a private corporation, whose charter is a contract between it and the State, not subject to alteration by the latter, so as to deprive the company of the rights secured by the charter."—Pierce on Am. R. R. Law, 20; Monon. Nav. Co. *vs.* Coon *et al.*, 6 Barr, 381; Erie and North-East. R. R. *vs.* Casey, 1 Grant, 275, 287, 301; Commonwealth, ex rel.. Claghorn *et al. vs.* Cullen *et al.*, 1 Harris, 133, 168 and 139; Brown *vs.* Hummel, 6 Barr, 86; Terret *et al. vs.* Taylor *et al.*, 9 Cranch, 43; Calder *vs.* Bull, 3 Dallas, 386, 388 and 389.

And this same doctrine is abundantly confirmed by this court, in the recent case of the city of Erie *vs.* the Erie canal company, 9 P. F. Smith, 174.

Treating the charter as it then stood, it was a contract which cannot be changed by one party imposing new duties and new penalties for the non-performance, and interfering with the rights acquired under it, without consent of the other. It needs but the slightest reference to the act of March, 1866, to show that new burdens are imposed by it. It requires the owner of the canal to change all its dams, including the one in controversy. These are twenty-six in number, and it was a fact not questioned in the argument of the case, that the expense of making the alterations would amount to over two hundred thousand dollars, independent of the cost of keeping them in repair. The alterations are required to be made as directed by an officer of the State, and not of the canal company. He is the sole judge of how the work should be done. What the effect of the alterations might be on the canal he would neither know or care. If the work is not done according to the plans furnished, the company is to be indicted for maintaining a public nuisance, and when convicted, fined not more than twenty thousand dollars, and if that admonition to furnish shad to the public at the company's expense be not regarded, by compliance within thirty days thereafter, the sheriff is to take down the dam at the company's expense, and to collect the cost by sale of any of their property—even their corporate rights and franchises. The act really transfers the whole question of repairs, after the work is done, what are necessary and when they shall be made, from the officers of the corporation to the commissioners of the several counties in which the dams are situated. The law of 1857 re.

quires the canal to be kept in good repair and operating condition. The railroad company is held responsible for damages if it is not; and the same duty and liability are imposed on the canal company. How can this duty be discharged, or with what justice can they be held responsible, if the discretion and power of doing the work in the first instance, and of making repairs afterwards, are taken from them and they are to become dependent for the privilege of touching these sluices or weirs, upon the whims of men elected without any reference to their knowledge of canals, and totally irresponsible for their condition. This Clark's Ferry dam feeds the canal for a distance of over forty miles, any injury to it would be an injury to the canal. If it goes down that portion of the canal will go down with it. To keep it up to supply sufficient water to the canal, at certain seasons of the year, requires work, vigilance and skill. While this dam was owned by the State, and since that time, there is not usually any more water than is required to keep the canal in "operating condition" during summer months. To maintain navigation at all during this time, it is necessary to close the schute of the dam and put splash boards on the top of it, that the water may be kept at sufficient height to feed this portion of the canal. Our statute books are filled with laws recognizing these facts, and appropriating money to do annually the necessary work, while the State owned the public improvements. If the comb of this dam is cut down, as would be required in making the alteration, and if the same thing was required to be done to each of the other dams along the line of this canal, it would be utterly impossible to keep the canal in "good operating condition," or in any condition at all suitable for purposes of navigation. To keep up the canal the dams must be maintained, but if the county commissioners decide that repairs are not necessary, then, despite the opinions of engineers or directors, the owners of the canal cannot touch that portion of their works. The Clark's Ferry dam was erected by the State and transferred, in its present condition, to the railroad company, without any superadded obligation, and so the present company hold it. But now, more than twelve years after the purchase, because a subsequently imposed duty is not performed, the dam, lawfully placed there by the State, is declared, by the State that put it there for a public benefit, to be a public nuisance, and it is directed to be removed as such. The consequence of this removal would be to render impossible, on part of the company, the previously imposed and contract duty of keeping up the canal. If the company comply with the terms of the act, and alter the dams, it would be at frightful expense, besides which the alterations would ruin the canal. If it refuses to comply, and the law can be enforced, the twenty-six dams would be taken out by legal authority, the canal rendered utterly worthless; the obligations of the law of 1857, imposed for the public good, would be wiped out by the penalties of the act of 1866, and the whole property of the canal company destroyed, without one cent of compensation.

5th. The act of 30th March, 1866, is unconstitutional, also, because it takes private property for public use, without compensation to the owner. This elementary principle is so well settled by judicial decision and so ably stated in the opinion of the court below, that only a few additional authorities need be cited.

"It is laid down by jurists as an acknowledged principle of universal law, that a provision for compensation is a necessary attendant upon the due exercise of the power of the law given to deprive an individual of his property without his consent."—Angel on Water Courses, secs. 457–8–9, &c.

To the same effect also Red. on R. R., 555–6; Pierce on Am. R. R. L., 38; 2 Kent's Com., 408–9; Cranshaw *vs.* The Slate River Co., 6 Rand.

(Va.) Rep., 245, 259, and 263–5; Washington Bridge Co. *vs.* The State, 18 Conn. Rep., 53, 64 and 65; Miller *vs.* The New York and Erie R. R. Co., 21 Barbour, Rep. 513; Bell *vs.* The Ohio and Pennsylvania railroad company, 1 Grant 106–6–7, and city of Erie *vs.* The Erie canal company, 9 P. F. Smith, 174.

This case is clearly distinguishable from those of the Delaware Division canal company, and the Lehigh coal and navigation company *vs.* the Commonwealth, recently decided by this court. In these cases the indictments were sustained on the ground that the nuisance complained of was no part of the canal, and not necessary to its use. Here the fact is otherwise. The special verdict finds *(inter alia)* that the dam in question was erected by the State about 1826. "As one of the *necessary works* connected with the construction of the Pennsylvania canal, * * * and that said dam thenceforth continued and still continues to be used as a part of said canal;" and the verdict further finds that "said dam and obstruction remain in the same condition, in all respects, in which it was before the passage of said act of March 30, 1866."

In the Commonwealth *vs.* Reed *et al.*, 10 Casey, 275, this court declares the law on this subject as follows:

"We should suppose that works of internal improvements, erected at the expense and by the officers of the State, for the benefit of the citizens at large, never could be regarded by the law as a nuisance; for the sovereign authority has expressly intended them to advance the prosperity of the community. If this be so, how is it possible that their character should be entirely altered by being placed in the hands of a private company, with an express requirement that they should be kept up for the purposes of the canal, in order that it may be and remain a public highway? The Commonwealth and its agents could not have been indicted, and it seems clear, that the company and its officers occupy precisely the same position."

It was earnestly contended in the court below, and is also contended here, that the act of 30th March, 1866, can be justified and sustained as a proper exercise of the police power of the State. This position is considered wholly untenable, and no authority has been shown to warrant it. Cooly on Constitutional Limitation, page 577, thus clearly defines the limits of the police power:

"The limit to the exercise of the police power in these cases must be this: The regulations must have reference to the comfort, safety or welfare of society; they must not be in conflict with any of the provisions of the charter; and they must not, under pretence of regulation, take from the corporation any of the essential rights and privileges which the charter confers. In short, they must be police regulations in fact, and not amendments of the charter in curtailment of the corporate franchise."

Idem, 577, 578, and cases there cited, especially Bailey *vs.* Philadelphia railroad company, 4 Harr., 389.

HALL & JORDAN,
For Defendant.

OPINION OF THE SUPREME COURT.

THE COMMONWEALTH OF PENNSYLVANIA, *vs.* THE PENNSYLVANIA CANAL COMPANY. } Error to the Court of Quarter Sessions of Dauphin county.

SHARSWOOD, J.—The very able and exhaustive opinion of the learned president judge of the court below, in entering judgment upon the special verdict, relieves us from the necessity of any further discussion of the

important constitutional and legal questions involved in this case. That opinion is in entire accordance with our own views, and we adopt it as the opinion of this court.

It is strongly urged, however, on behalf of the Commonwealth, and this has been the principal contention here, that he fell into a fundamental error, which vitiated all his reasoning, by treating the case as though it were a question between the Commonwealth and the Pennsylvania railroad company, who were the original purchasers of the dam at Duncan's island, together with the other public works under the provisions of the act of Assembly passed May 16, 1857, (Pamph. Laws, 519,) entitled "An Act for the sale of the main line of the public works." It is apparently conceded that the Pennsylvania railroad company took the works under that act by contract, and paid for them to the State a valuable consideration, and that consequently the State could not impose upon their grantee any new burthen not contained in the original sale; for that would be for one of the parties to add a new term or condition to the contract. In that respect the case is stronger than the City of Erie *vs.* the Erie canal company, 9 P. F. Smith, 174—for the Erie canal company was the donee, rather than the vendee of the Commonwealth. But it is said that by the act of 1857 the Pennsylvania railroad company were not authorized to sell any part of the works to the Pennsylvania canal company; because at the time of the original sale of the whole it was not then an existing corporation, and consequently when the last named company was incorporated by the act of May 1, 1866, (Pamph. Laws, 1068,) and were thereby authorized and empowered to purchase, take and hold from the Pennsylvania railroad company, and which said railroad company were thereby authorized and empowered to grant, the canal from Columbia to the junction at Duncan's island, etc., with all the property and appurtenances thereto appertaining, they necessarily took the same under and subject to the provisions of the previous act of Assembly of March 30, 1866, (Pamph. Laws, 370,) entitled "An Act relating to the passage of fish in the Susquehanna river and certain of its tributaries," for a violation of which this indictment was preferred. The argument has great ingenuity and plausibility, and if its premises be admitted the conclusion would seem to follow logically and inevitably. All legislative acts alienating public rights or domain are to be strictly construed, and no such grant is to be inferred by implication merely. Accepting this as not only the well established but sound and reasonable canon of construction, let us examine how it applies in the case before us; whether there is not here a sufficient actual expression to be beyond the reach of the rule. By the third section of the act of 1857 it was provided "that it shall be lawful for any person or persons, or railroad or canal company, now incorporated, or which may hereafter be incorporated, by and under the laws of this Commonwealth, to become the purchasers of the said main line of the public works." Then, after various provisions, applicable specially and severally in case an individual or an association of individuals, or the Pennsylvania railroad company should become the purchasers; and directing, in the fifth section, that immediately after the said purchaser or purchasers, or their assigns, shall take possession of the same, the said purchaser or purchasers, or assigns, shall be bound ever thereafter to keep in good repair and operating condition the main line of said railroad and canal, extending from Hollidaysburg to Philadelphia, etc. It is added in these words: "*Provided*, That said purchasers be authorized to grant, sell and convey, or to lease for a term of years, upon such conditions as may be agreed upon, any part or portion of said canals, and any corporation or association of individuals authorized by this act to purchase the

whole, may purchase or lease such portions and hold the same subject to the conditions and entitled to all privileges contained in this act." As, by the third section, any corporation thereafter to be incorporated and entitled to become purchasers of the whole it would seem, at first blush, to follow by express words that such corporations would also be authorized to become sub-purchasers or lessees of part. But it is maintained, and here is the stress of the argument, that by the third section it was only meant that corporations, which should be incorporated between the date of the act and the sale, should become purchasers; for how, in the nature of things, it is asked, could a corporation purchase which was not in existence at the time of the sale? By a necessary inference, a corporation not in existence at the time of the sale could not become a purchaser of a part under the fifth section. The argument is more refined than solid. We must bear in mind that the established canon of construction is that *verba relata non maxime operantur per referentiam ut in eis in esse videntur*, 1 Just., 159, a. If, in pursuance of this rule, we transfer the words of the third to the fifth section, they must then receive the same construction which it is conceded that they have in the third section, so as to authorize a sale to any corporation created after the passage of the act and before the sale or lease mentioned in the fifth section. That this was really the mind of the Legislature can hardly be matter of doubt with any one who reflects upon the circumstances of the case. That body cannot fail to have perceived that the only really practicable mode by which a sub-sale or lease of parts of a work of that character was likely to be effected would be by some corporation especially to be created for the purpose, just as they evidently did see the same thing in the provision made for the original sale of the whole. It was highly improbable that any corporation existing at the time of the original sale could, consistently with its charter, unless incorporated expressly for the purpose, become a sub-purchaser or lessee of part. It follows that the Pennsylvania canal company, incorporated May 1, 1866, and specially authorized, as we have seen, to purchase from the Pennsylvania railroad company, became their assignees under and by virtue of the original power to sell contained in the act of 1857, and of course took the subject of the grant in its words with all the privileges thereby conferred upon them. Nay, the terms of the act of incorporation, May 1, 1866, seem intended to leave no possible doubt upon this point, for it declares that they shall be vested "with all the powers, privileges and franchises granted or intended to be granted" to the Pennsylvania railroad company. And this is again repeated: "And the said Pennsylvania canal company, their successors and assigns, be and they are hereby vested with the said powers, privileges and franchises." They became, thereby, the assignees of the Pennsylvania railroad company, and stood in their shoes to all intents and purposes as parties to the contract authorized by the act of 1857. The learned president below, therefore, fell into no error in treating the case as though it was a question between the Commonwealth and the Pennsylvania railroad company.

The franchises conferred upon the Pennsylvania railroad company, and vested in the Pennsylvania canal company, as their assigns, on this great public highway, are undoubtedly still within the right of eminent domain of the State, and may be resumed or taken under the limitation of Art. IX, Sect. 10, of the Constitution, "nor shall any man's property be taken or applied to public use without the consent of his representatives and without just compensation being made."—West River bridge company *vs.* Dix, 6 Howard (U. S.) Rep., 507; Commonwealth *vs.* Pittsburg and Connellsville railroad company, 8 P. F. Smith, 50. Judgment affirmed.

MASSACHUSETTS—THE CASE OF THE HOLYOKE DAM, AT HADLEY FALLS, ON THE CONNECTICUT.

The Holyoke water-power company had for object the erection of a dam twenty-eight feet high, on the Connecticut, for creating a water-power for great mills. First the corporation applied to the "general court" for a charter. In this charter permission was given to build a dam, *provided*, the owners of fisheries *above* the dam were indemnified. That was all; nothing said *pro* or *con* about a fish-way. The corporation put up their dam *without* a fish-way, and so it stood for a score of years. Now, then, the "common law" of Massachusetts (ancient charter law, presumably) says that fish-ways shall be provided in dams. So the fish commissioners go to the Holyoke company and order the fish-way to be made, alleging that the company came under the provisions of the said "common law." The charter grants no exemption from a fish-way, and charters are to be construed *against* the grantees and other reasons. The corporation refused; was brought before court, and the case was decided in favor of the Commonwealth.

The corporation has appealed to the Federal courts. Some scraps of Massachusetts law are appended, which go toward an elucidation of the case. But it will be minutely reported in the report of the Massachusetts fish commissioners for the current year.

ANCIENT CHARTERS.

[Page, 148, Chap. 63.]

2. All householders have free fishing in any great ponds, bays, coves and rivers, so far as the sea ebbs and flows within their own town, unless freemen of said town or general court have otherwise appropriated them: *Provided*, That no town shall appropriate to any persons any great pond, containing above ten acres of land, and that no man shall come upon another's land without their leave otherwise than as hereafter expressed.

3. It is declared that in all creeks, coves and other places about and upon salt water, where the sea ebbs and flows, the proprietor of the land adjoining shall have propriety to the low-water mark, where the sea doth not ebb more than one hundred rods, and not more wheresoever it ebbs further: *Provided*, That such proprietor shall not, by this liberty, have power to stop or hinder the passage of boats or other vessels in or through any sea, creeks or coves, to other men's houses or lands.

4. And for great ponds, lying in common, though within the bounds of some town, it shall be free for any man to fish and fowl there, and may pass and re-pass on foot, through any man's propriety for that end, so they trespass not upon any man's corn or meadow.

ABSTRACT OF PRINCIPAL DECISIONS.—MASS.

[1641, 47.]

As to fishing, &c., in tide-waters, it seems to have been intended to restrict the right to householders in the town where the waters were. But this part of the ordinance is not at all regarded in practice, and probably never was intended to apply to the common law right of every citizen in those waters. Otherwise as to ponds, it is believed that great ponds, that is, of more than ten acres, have in many instances become private property. "*But whether the owners can restrain all other persons from fishing therein is not known to have been decided.*"—*Metcalf on Contracts*, p. 299.

This statement of Judge Metcalf is the latest authority on the rights of riparian owners of great ponds, and the probable course of the law in the matter can only be inferred from the cases which have brought the matter indirectly before the courts.

In the case of *West Roxbury vs. Stoddard*, the tendency seems to have been to favor the common law rights of the public *against* those of riparian owners. Judge Hoar gave as his opinion that "fishing, fowling, boating, bathing, skating or riding upon the ice, taking water for domestic or agricultural purposes, or for use in the arts, are lawful and free to all persons, upon these ponds, if such persons own lands adjoining them or can obtain access to them without trespass, so far as they do not interfere with the reasonable use of the ponds by others, or with the public right, unless in cases where the Legislature have otherwise directed."—7 *Allen*, 171.

Shaw, C. J., in *Cummings, et al., vs. Barrett, et al.*, 10 Cushing, 188, says: "What the rights are of adjacent or riparian owners of land bordering on such ponds (great) has, we believe, never been the subject of adjudication or discussion."

The common law right will probably be recognized in the courts, but the most important point is to decide what shall constitute trespass with damages against parties passing over the lands of riparian owners to reach great ponds for the purpose of fishing therein.

If roads exist, leading to such ponds, actions against parties for trespass on riparian lands, when such roads might be used, would probably lie.

By the Colony Laws the common law right to fish in rivers, so far as the tide ebbs and flows, is sustained.

Nevertheless, in 1779, in the case of *Freary vs. Cooke*, 14 Mass., 488,* an attempt was made by riparian owners to assert their right to the fishery *ad filum aquae*, and to get damages from the defendant for fish taken therein. In this case the plaintiff urged a *custom* as defence, which was not sustained by the court, the custom not being established as valid. Moreover the tenor of the decision seems to favor the view that no custom would have availed in prejudice of common law rights.

In *Coolidge vs. Williams*, it was decided that if the Legislature makes no disposal of the fishery rights in navigable rivers, riparian towns may dispose of the same, and if such towns do not avail themselves of this privilege, then all inhabitants of such towns may take fish in such rivers, provided they do not trespass on the rights of others. Private statutes are not to be construed against existing rights and privileges.

The decision of this case extends the privilege, given by the colony laws to householders, to all citizens.

In *Commonwealth vs. Chapin*, it was urged, on the authority of Pennsylvania precedents, that the common law doctrine as to navigable rivers did not apply to great rivers, such as the Connecticut, and that such rivers were, in the technical sense, navigable above the ebb and flow of the tide, and that riparian land owners could have no common law rights in such great rivers.

But it was decided that in this State *all* rivers are navigable so far as the tide ebbs and flows; that in navigable rivers fishing rights are common.

But above the ebb and flow the public have right of way, though not a right of fishing, for the public have an easement for passing in boats, etc., in rivers, which, though not classed with navigable rivers, are in fact navigable rivers for craft above the ebb and flow of the tide.

An interesting question here comes up as to the exact definition of the

*The river being navigable at this point.

point where the tide ceases to ebb and flow. I have examined the cases very carefully with reference to this point, and have been able to find no decision which touches upon this matter and no reference to such a decision. The practical state of the case is that any plaintiff would have to prove that the tide did not ebb and flow in the waters which he should seek to protect, just as in any action for trespass the plaintiff must begin by proving his title.

As to the doctrine of easements referred to above in *Commonwealth vs. Chapin*, "an uninterrupted adverse use during twenty years" would be necessary to establish such easement.—*Gen. Stat. Ch.*, 90, 33.

As to the obligation of dam-owners in respect to fishways in their dams, it was decided in *Stoughton vs. Baker*, 4 Mass., 522, that, although the Legislature appoint committees to make fish-ways in certain dams, partly or wholly, at the expense of the owners, said owners cannot be charged with the expense of such committees; *no prescriptive rights, from charter, or otherwise, can prejudice the right of the public that fish-ways shall be kept open and all dams are held subject to this restriction.*

The government can enforce compliance with these laws as to dams, though the complete prostration of any dam will give the owner a remedy by action at law. Finally, such committee may cause the alterations to be made under their direction; but they are not personally answerable for those whom they employ; and as the exercise of their authority is personal, it cannot be delegated to any other person, or even to one of their own number.

In this case it was openly attempted to question the right of the Commonwealth to oblige dam-owners to put fish-ways into their dams. The position seemed to be a strong one, for the dam in question was held under a charter dated in 1633, and the said charter was extended by a grant made in 1634 of a several fishery from the said dam to the weir below.

Accordingly it seems that if this right of the Legislature could be shaken in any case of prescriptive claim, it could have been so shaken in this. The result of the case evidently shows the tenor of judicial decision in this point, as well as in the matter of great ponds and estuaries, to have been in favor of *all* common law rights of the public, as against those of *all* individuals.

In the case of *M'Farlin vs. Essex Co.*, 10 Cushing, 304, as to fish as *feræ naturæ*, Shaw, C. J., said that it was the established law of Massachusetts that the *right to the soil under rivers not navigable is in the riparian owners.* If the same person owns the land on both sides of any stream, the property in the soil is wholly in him, subject to certain duties to the public; and if different persons own the land on opposite sides, each is proprietor of the soil under the water to the middle or thread of the stream (*ad filum aquæ.*) In this case, also, it was incidentally decided that no right by prescription could be acquired but by *adverse* use and occupation during twenty years, and from the mode of statement adopted by the judge already mentioned, I should doubt if such prescriptive rights could *ever* be acquired. At all events, it was stated in a doubtful form. Also decided that, though A. should adversely occupy ten years a fishery against B., said A. cannot transfer, by deed or otherwise, to C. his ten years' prescription, thereby enabling C., by ten years' further possession, to claim absolutely under the easement statute. From this case, and from *Waters vs. Libby*, 4 Pickering, 146, I conclude that fish in rivers are always to be regarded as *feræ naturæ*, whether the rivers are navigable or not; hence no proprietor, even above the ebb and flow of the tide, could obstruct the passage of fish; all he has a right to do being to prevent persons, acting

without his leave, from fishing on his lands, or opposite to them, *ad filum aquæ*.

The two cases of *Melvin vs. Whiting*, 10 Pickering, 295, and 13 Pickering, 184, it was decided that adverse possession and occupation on the part of an heir should be counted as part of the twenty years of such possession required by statute to establish an easement.

COMMISSIONERS OF FISHERIES FOR 1871, AS FAR AS ASCERTAINED.

Maine.—Charles G. Atkins, Augusta.

New Hampshire.—W. E. Sanborn, Weirs; W. W. Fletcher, Concord; T. E. Hatch, Keene.

Vermont.—M. C. Edmonds, Weston; M. Goldsmith, Rutland.

*Massachusetts.**—Theodore Lyman, Brookline; E. A. Brackett, Winchester; Thos. Talbot, North Billarica.

Connecticut.—W. M. Hudson, Hartford; Robert G. Pike, Middletown; —— Lord, Old Saybrook.

Rhode Island.—Newton Dexter, Providence; S. S. Foss, Woonsocket.

New York.—Horatio Seymour, Utica; George M. Cooper, ———; Robert B. Roosevelt, New York.

New Jersey.—Dr. Benj. P. Howell, Woodbury; Dr. John H. Slack, Bloomsbury.

Pennsylvania.—James Worrall, Harrisburg.

POSTSCRIPT, MAY 9, 1871.

The dip nets mentioned in the text have already made their appearance in front of the Columbia dam, and hand nets of the kind are plied freely. The fate of the fish baskets below Columbia has not, it seems, deterred them, and mullet fishing seems still to be profitable. It is certain that the catch at Columbia of shad this season is very much increased beyond the average. Old fishermen predict that it will be nearly, if not quite, doubled. This arises entirely from an approach to obedience to the laws of the State. Let this example be followed on the other reaches of the Susquehanna, and the same good results will follow. The Susquehanna has been lower in this last April than it has been for fifty years during the same month. The catch *above* Columbia may be materially affected by this circumstance. Devices to frighten the shad have, I am informed, been placed in front of both the navigation and fish sluiceways—an indictable criminal offence, yet the offenders are not prosecuted. Until this apathy is cured there will be no increase in our fisheries. Yet, notwithstanding all, on Thursday, the 4th inst., at or near Newport, Perry county, on the Juniata, eighty-three shad were caught at a haul, and there is a fair prospect for a succession of such catches before the present high water subsides. Let us give the shad only half a chance, and they will yet be as plentiful as ever. J. W.

*We have to lament the death, by a railroad accident, of Mr. Alfred R. Field, one of the Massachusetts commissioners. He was among the most eminent railway engineers of Western Massachusetts, and his professional advice has been particularly valuable in the construction of the great fish-ways at Holyoke and Lawrence.